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APRIL 1974

FATS AND OILS Situation

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Table 1.--U.S. Fats and Oils Situation at a Glance

Item	Unit	Marketing year total or average		1973				1974	
		1971-72	1972-73 Preliminary	January	February	November	December	January	February
SOYBEANS (Year beg. Sept.)									
U.S. average price received by farmers	$ bu.	3.03	4.37	4.11	5.49	5.14	5.65	5.87	6.07
U.S. support price	$ bu.	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Price, No. 1 yellow, Illinois points	$ bu.	3.24	6.22	4.46	5.80	5.57	5.92	6.19	6.35
Price, No. 2 yellow, f.o.b., Gulf	$ bu.	3.45	6.32	4.79	6.43	5.91	6.21	6.48	6.63
Price, No. 2 yellow, f.o.b., Baltimore	$ bu.	3.46	6.35	4.93	6.40	5.94	6.24	6.44	6.61
Receipts at mills	Mil. bu.	716.3	714.4	89.8	61.5	108.1	62.9	77.9	74.7
Crushings	Mil. bu.	720.5	721.8	70.6	64.8	71.8	72.8	74.7	69.8
Oil yield per bushel crushed	Lb.	10.98	10.59	10.25	10.44	10.66	10.57	10.68	10.63
Meal yield per bushel crushed	Lb.	47.43	47.01	46.92	47.00	47.04	46.78	47.05	47.09
Stocks at mills, end of month	Mil. bu.	38.1	30.7	136.6	133.3	125.8	115.8	119.0	123.9
Exports	Mil. bu.	416.8	480.2	47.1	54.7	74.4	58.0	48.6	57.0
SOYBEAN OIL (Year beg. Oct.)									
Production	Mil. lb.	7,891.5	7,501.0	723.5	676.8	764.9	769.8	797.7	741.6
Domestic disappearance	Mil. lb.	6,438.9	6,682.4	605.4	528.6	661.9	560.3	739.4	601.8
Exports	Mil. lb.	1,398.3	1,068.2	63.7	127.9	31.9	116.1	125.5	124.9
Stocks, end of month	Mil. lb.	785.2	515.5	948.6	966.5	599.9	690.5	623.3	638.1
Price, crude, Decatur	¢ lb.	11.3	16.5	10.1	13.0	20.4	26.0	28.6	36.4
SOYBEAN MEAL (Year beg. Oct.)									
Production	Thou. ton	17,024.2	16,708.8	1,656.0	1,523.1	1,688.0	1,703.8	1,757.0	1,643.5
Domestic disappearance	Thou. ton	13,110.0	11,920.2	1,096.9	1,008.2	1,184.2	1,140.9	1,338.4	1,048.7
Exports	Thou. ton	3,805.4	4,744.8	580.1	496.0	495.8	520.4	454.2	531.1
Stocks at mills, end of month	Thou. ton	191.7	183.2	193.3	210.0	242.2	284.6	249.0	292.7
Price, 44% protein, bulk, Decatur	$ ton	90.20	229.00	188.40	218.75	167.00	192.00	172.00	160.00
Price, 49-50% protein, bulk, Decatur	$ ton	98.20	253.40	210.40	240.00	179.00	223.00	192.40	175.25
COTTONSEED (Year beg. Aug.)									
U.S. average price received by farmers	$ ton	56.80	49.60	51.80	51.90	97.30	98.70	100.00	101.00
U.S. support price, basis grade	$ ton	1/	1/	1/	1/	1/	1/	1/	1/
Receipts at mills	Thou. ton	3,977.2	5,152.6	302.4	239.2	1,649.2	1,004.2	337.6	113.5
Crushings	Thou. ton	3,959.9	4,880.1	527.9	479.8	531.8	465.1	549.1	465.5
Stocks at mills, end of month	Thou. ton	235.0	507.5	2,440.4	2,199.8	2,216.0	2,755.1	2,543.6	2,191.6
COTTONSEED OIL (Year beg. Aug.)									
Production	Mil. lb.	1,274.5	1,534.8	163.3	152.0	169.8	149.0	176.9	150.9
Domestic disappearance	Mil. lb.	815.3	961.2	76.8	71.6	107.7	114.2	103.7	96.0
Exports	Mil. lb.	421.4	585.7	58.2	56.6	24.9	38.3	28.8	79.0
Stocks, end of month	Mil. lb.	203.9	190.0	215.4	239.1	161.6	158.0	202.4	177.9
Price, crude, Valley	¢ lb.	13.2	13.7	11.0	13.9	19.5	25.6	28.9	35.0
COMMERCIAL LARD (Year beg. Oct.)									
Production	Mil. lb.	1,645.6	1,285.0	116.0	96.0	113.0	100.0	113.0	89.0
Domestic disappearance	Mil. lb.	1,459.2	1,168.5	96.4	98.3	94.3	86.7	91.0	86.3
Exports	Mil. lb.	170.8	126.4	18.5	4.9	15.5	5.8	9.4	13.8
Shipments to U.S. Territories	Mil. lb.	49.0	5.8	.2	.5	1.0	1.0	N.A.	N.A.
Stocks, end of month	Mil. lb.	44.0	28.4	52.1	44.5	37.3	43.7	56.3	45.2
Price, loose, tanks, Chicago	¢ lb.	10.4	16.5	9.5	10.5	21.5	22.5	24.0	27.0
CREAMERY BUTTER (Year beg. Oct.)									
Production	Mil. lb.	1,120.8	962.0	96.1	84.4	60.4	67.5	80.6	69.0
Domestic disappearance	Mil. lb.	1,042.7	1,030.0	94.0	83.1	114.0	74.2	85.8	68.8
Stocks, end of month, total	Mil. lb.	178.4	94.3	109.9	110.0	54.3	46.4	51.4	52.0
Stocks, end of month, CCC	Mil. lb.	160.4	60.5	86.1	92.8	26.4	22.8	15.2	10.6
Price, 92-score, Chicago	¢ lb.	68.2	68.3	67.7	67.7	75.0	73.0	68.5	64.1
FLAXSEED (Year beg. July)									
U.S. average price received by farmers	$ bu.	2.38	3.10	3.51	4.15	8.10	8.63	9.36	10.10
U.S. support price, farm basis	$ bu.	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Price, No. 1, Minneapolis	$ bu.	2.69	3.94	3.90	4.52	8.82	9.22	10.06	10.67
Receipts at mills	Thou. bu.	20,328	17,814	1,825	2,094	1,480	945	664	500
Crushings	Thou. bu.	20,980	19,944	1,646	1,279	1,447	1,121	1,196	993
Exports	Thou. bu.	1,904	8,775	26	35	12	209	11	42
Stocks at mills, end of month	Thou. bu.	2,688	1,396	1,543	2,359	3,390	3,214	2,682	2,189
LINSEED OIL (Year beg. July)									
Production	Mil. lb.	426.0	393.4	31.3	25.1	28.2	22.3	24.2	19.6
Domestic disappearance	Mil. lb.	286.7	293.4	37.8	11.2	19.4	12.0	31.1	15.1
Exports	Mil. lb.	65.9	263.0	21.8	15.0	8.4	14.3	5.1	10.7
Stocks, end of month	Mil. lb.	276.6	113.0	225.3	224.1	86.3	82.2	70.1	63.9
Price, raw, Minneapolis	¢ lb.	8.9	10.1	9.5	9.5	15.0	35.0	35.0	40.2
INEDIBLE TALLOW & GREASE (Year beg. Oct.)									
Production	Mil. lb.	5,095.3	4,845.2	479.4	435.4	398.8	360.4	371.3	405.0
Domestic disappearance	Mil. lb.	2,729.8	2,571.4	232.6	205.7	208.9	197.3	130.6	208.1
Exports	Mil. lb.	2,446.6	2,280.2	244.7	180.7	209.8	178.9	189.0	200.8
Stocks, end of month	Mil. lb.	329.1	328.4	343.0	392.1	370.1	355.6	407.7	404.5
Price, bleachable fancy, Chicago	¢ lb.	6.8	12.8	7.8	9.0	15.6	17.1	17.9	21.8
COCONUT OIL (Calendar year's 1972 and 1973)									
Production	Mil. lb.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Imports	Mil. lb.	677.0	716.9	69.8	112.5	64.8	74.6	24.3	25.3
Domestic disappearance	Mil. lb.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Stocks, end of month	Mil. lb.	116.5	105.9	208.2	220.3	102.7	105.9	101.4	91.8
Price, crude, Pacific Coast	¢ lb.	9.8	23.4	9.9	13.1	32.6	43.1	49.1	53.5
PALM OIL (Calendar year's 1972 and 1973)									
Imports	Mil. lb.	431.1	387.1	25.6	65.7	39.2	29.8	26.4	18.8
Domestic disappearance	Mil. lb.	342.1	402.3	14.5	47.7	34.1	28.1	29.6	22.8
Stocks, end of month	Mil. lb.	93.5	58.1	103.9	118.0	56.4	58.1	52.0	47.8
Price, Congo, tanks, New York	¢ lb.	10.6	14.6	9.8	9.8	19.5	19.5	25.9	28.0
PEANUTS (Year beg. Aug.)									
U.S. average price received by farmers	¢ lb.	13.6	14.4	14.2	---	16.1	16.5	16.5	---
U.S. support price - Farmers' stock basis	¢ lb.	13.42	14.25	14.25	14.25	16.42	16.42	16.42	16.42
Millings, all types, Farmers' stock basis	Mil. lb.	2,650.3	2,888.3	328.5	271.2	386.7	325.3	396.4	287.9
Production of shelled edibles	Mil. lb.	1,385.6	1,503.1	167.1	138.6	222.8	171.2	216.5	150.6
Total edible uses - shelled basis	Mil. lb.	1,087.1	1,135.6	92.2	86.5	100.5	90.4	108.7	104.4
Crushings - shelled basis	Mil. lb.	612.3	638.8	58.8	55.6	48.4	49.9	51.5	45.0
Commercial stocks, end of month - FS	Mil. lb.	391.8	428.7	2,012.4	1,766.1	2,560.6	2,391.7	2,138.2	1,861.2
CCC stocks, end of month - FS	Mil. lb.	---	---	---	---	---	---	---	---
PEANUT OIL (Year beg. Aug.)									
Production	Mil. lb.	260.0	268.5	24.5	23.4	19.2	21.1	21.1	18.7
Domestic disappearance	Mil. lb.	194.7	158.3	12.5	14.2	13.2	11.1	13.7	14.2
Exports	Mil. lb.	74.6	104.9	11.1	6.6	2.9	5.4	4.1	6.5
Stocks, end of month	Mil. lb.	32.1	37.3	22.1	24.6	20.5	25.2	28.3	26.3
Price, crude, Southeast mills	¢ lb.	17.1	18.2	18.6	18.7	25.1	32.5	41.6	44.8

1/ No support announced. N.A.--Not available.

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SPECIAL ARTICLES
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SUMMARY

Soybean production in 1974 could total 1,540 million bushels, just under last year's record if acreage intentions and projected yields are realized. But adding this to the large carryover expected in September would boost 1974/75 supplies to 1.8 billion bushels, about a tenth above the current season and a new record. Farmers in March indicated plans to plant 55 million acres of soybeans this year, about 2¼ million below the record of last year. Yields per acre are projected to increase.

Total soybean utilization next season is projected to increase by about 100 million bushels to 1.5 billion bushels. Both crushings and exports are projected to increase by about 50 million bushels each over the levels expected for the current marketing year. Such gains would not quite keep pace with production, and would result in an increase in carryover stocks on September 1, 1975, to nearly 300 million bushels.

Total soybean disappearance during the current marketing year is expected to increase about 100 million bushels over last year to 1.4 billion, a new record. The gain will occur during March-August. Tight edible oil supplies and strong demand for soybean oil are expected to help boost crushings to 775 million bushels, up 7 percent. Strong overseas demand for meal is expected to boost soybean exports to 525 million bushels, up 9 percent. However, total soybean use will fall short of the 1973 soybean output, and carryover stocks this September probably will climb to around 240 million bushels or about 4 times the volume of last September's low level.

Despite record supplies and prospects for a sizeable carryover at season's end, soybean prices to farmers are high. Prices are being influenced by uncertainties in both agricultural and general economies at home and abroad—problems related to the energy crisis, inflation, unstable world monetary conditions, as well as the strong demand for and tight supplies of most agricultural commodities, and concern over food and feed grain production prospects.

Soybean farm prices during September-March averaged about $5.75 per bushel, compared with $4.19 for the same period last year. Prices are less variable this year. But over the next few months they will be sensitive to the U.S. 1974 crop plantings and outlook, farmer holdings of 1973-crop soybeans, and to world economic and political developments. The possibility of a U.S. dock strike next fall could boost U.S. exports sharply this summer.

Heavy domestic requirements for soybean oil to meet expanding demand for vegetable oil and to cover shortfalls in butter and lard production are expected to boost domestic disappearance to 7.2 billion pounds, 0.5 billion above the record of last year. The large offtake this year is keeping crushers and refiners busy. Also, pipeline stocks so far have

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increased only moderately. Soybean oil exports are expected to total 1.2 billion pounds, up slightly from last year. This will leave stocks at season's end at about 0.6 billion pounds, slightly above last September's low level, but less than 1 month's requirements.

A new rule proposed by the Federal Energy Office on March 27 and published in the Federal Register of March 29 would give a priority to hexane use as a solvent. This should help oilseed processors to secure the hexane needed for oil extraction. A few soybean processors have experienced difficulty in obtaining hexane for current operations and for starting up new plants.

Soybean oil prices (crude, Decatur) continue high. They reached an alltime peak of 36½¢ per pound in February but declined to about 29¢ by the end of March. So far this season they have averaged 27¢ compared with about 11¢ last year. Continued high prices are likely at least until soybean oil production overtakes demand and pipeline stocks of edible oils at home and abroad increase to more comfortable levels.

Domestic use of soybean meal is expected to expand to about 13 million tons, about a tenth above last year. Lower prices and larger supplies should encourage higher feeding rates. Soybean meal exports are estimated at about 5½ million tons, up from the 4.7 million of last season. However, volume over the rest of the year will be influenced by exports of soybeans and soybean meal from Brazil and the availability of Peruvian fish meal.

Soybean meal prices (44 percent protein, Decatur) in March averaged $149 per ton, down sharply from the $412 of last June and the lowest since November 1972. The decline reflects increased soybean meal production and supplies which are more adequate in relation to demand. Although prices are expected to continue firm over the balance of the year, they will average sharply below the $289 of last April-September.

Cottonseed oil supplies total 1.8 billion pounds, about 3 percent above the previous year. Much of this will be used domestically to help fill the heavy requirements for vegetable oils and to offset smaller butter and lard production, which are expected to be down about 15 percent and 10 percent, respectively. Exports also are expected to continue strong.

1973 Speeches and Articles Available

A free copy of the following releases may be obtained from the ERS Division of Information, Rm. 0054 South Building, U.S. Department of Agriculture, Washington, D.C. 20250:

"An Economic View of Soybeans and Food Fats in the 1980's" by George W. Kromer. Speech before the Institute of Shortening and Edible Oils, Inc., Scottsdale, Arizona, March 16, 1973.

"U.S. Soybean Economy in the 1980's" by George W. Kromer. Reprint from Fats and Oils Situation, FOS-267, April 1973. ERS-518.

"Economic Situation and Outlook for Tallow and Palm Oil in the United States," by George W. Kromer. Paper presented before the American Oil Chemists' Society Symposium on Recent Advances in Lipid Based Surfactants, New Orleans, Louisiana, May 1, 1973.

"Economic Situation and Outlook for Edible Vegetable Oils in the United States" by George W. Kromer. Speech before the Potato Chip Institute International in Huron, Ohio, June 11, 1973.

"Food Fat Consumption: More Now and in the Future" by George W. Kromer. Paper presented at the Symposium on Fats and carbohydrates in Processed Foods, sponsored by the American Medical Association, Regency Hyatt, Chicago, Illinois, October 1, 1973. 27 pages including Statistical Appendix.

"Outlook for Oilseeds, Fats and Oils" by George W. Kromer. Speech at the 1974 National Agricultural Outlook Conference, Washington, D.C., December 19, 1973.

FATS AND OILS SITUATION

SITUATION AND OUTLOOK

Oilseed Acreage Unchanged

Based on the March 1 USDA survey of farmers' intentions, acreage planted to the 4 major U.S. oilseed crops in 1974 will total 73.2 million acres, about the same as a year ago.

Soybean producers intend to plant 55 million acres, about 2¼ million below last year's record and just a little lower than had been indicated by the January survey. Acreage is down in the North Central and South Central regions but up in the South Atlantic States. A more favorable outlook for returns from corn is a major influence behind the cutback in prospective soybean acreage. An estimated 54 million acres of soybeans will be harvested if growers plant the intended acreage and harvesting conditions are normal. With projected yields, 1974 production would total 1,540 million bushels, compared with the record 1,566 million bushels in 1973. When added to the large carryover expected this coming September, supplies would total a record 1.8 billion bushels, about a tenth above this season.

Total soybean disappearance is expected to increase in 1974/75 by about 100 million bushels to 1.5 billion bushels. Both crushings and exports should increase above the levels expected this year. However, even with this expansion, use would not quite keep pace with production, resulting in a further increase in carryover stocks on September 1, 1975, to just under 300 million bushels, somewhat above the 240 million expected for September 1, 1974.

Cotton growers intend to plant nearly 15 million acres in 1974, about a fifth above 1973, and slightly above the indications in January. Increased acreage is expected in all regions. If these intentions materialize, cottonseed supplies in 1974/75 would be up slightly from the 5.7 million tons of 1973/74.

Flaxseed farmers intend to plant about 1.8 million acres, up slightly both from last year and from the January intentions. Increases are planned in Minnesota, South Dakota and Texas with declines for North Dakota and Montana. If yields are average, production from this acreage would total about 20 million bushels, a fifth above last year. Below-trend yields last year reduced output. Total 1974/75 supplies would be nearly 22 million bushels, about 8% above this season, but still a very tight situation.

Flaxseed crushings in 1974/75 are projected at around 17 million bushels, up nearly a tenth. Due to short supplies, exports are estimated at only one-half million bushels. This would leave carryover stocks on July 1, 1975, at a tight 2 million bushels, or about the same as that now expected for July 1, 1974.

Peanut growers intend to plant 1.5 million acres, not much changed from a year ago. Peanuts are under acreage controls and the national allotment has been held at the legal minimum of 1.6 million acres each year since 1956. If growers follow these intentions and yields are on trend, the 1974 peanut crop will be around 3½ billion pounds, up slightly from last year's record. This would be more than ample for domestic edible requirements and farm use, resulting in about a fourth to one-third of the crop being in excess of domestic edible needs.

SOYBEANS

Prices Continue High

Despite record supplies and prospects for a sizeable carryover this coming September, prices to farmers are high, reflecting the many uncertainties plaguing agricultural and general economies both at home and abroad. Among these problems are the energy crisis, inflation, unstable world monetary conditions, as well as the strong demand and tight supplies of most agricultural commodities for the remainder of the 1973/74 marketing year, and concern regarding prospects for U.S. food and feed grain production in 1974.

Prices rose from a little over $5 last November to $5.96 in March, averaging about $5.75 for September-March compared with $4.19 for this period last year. Although high, prices this year have been more stable than the wild gyrations of last season. Prices over the next few months will be sensitive to 1974 crop plantings and prospects, farmer holdings of 1973-crop soybeans, and to world economic and political developments.

Cash receipts from soybean marketings in 1973 nearly doubled to $8.1 billion, a new record and almost $2 billion above cash sales of corn. This is the second consecutive year in which soybeans exceeded corn in cash receipts. Soybeans are expected to continue as the leading cash crop in 1974. These comparisons are based on cash receipts from sales only and do not take into consideration government

TABLE 2.--OILSEEDS: PROSPECTIVE PLANTINGS FOR 1974 (BASED ON MARCH INTENTIONS OF FARMERS) WITH COMPARISONS, 1950-74

YEAR	SOYBEANS				COTTONSEED			
	ACREAGE		PRODUCTION		COTTON ACREAGE		COTTONSEED PRODUCTION	
	PLANTED 1/	HARVESTED FOR BEANS	PER ACRE HARVESTED	TOTAL	PLANTED	HARVESTED	PER ACRE HARVESTED	TOTAL
	1,000 ACRES	1,000 ACRES	BUSHELS	MIL. BUSHELS	1,000 ACRES	1,000 ACRES	POUNDS	1,000 TONS
1950	15,048	13,807	21.7	299.2	18,866	17,843	460	4,105
1951	15,176	13,615	20.8	283.8	29,353	26,949	467	6,302
1952	15,958	14,435	20.7	298.8	28,065	25,921	478	6,191
1953	16,394	14,829	18.2	269.2	26,872	24,341	554	6,749
1954	18,541	17,047	20.0	341.1	20,052	19,251	593	5,709
1955	19,674	18,620	20.1	373.7	17,991	16,928	714	6,043
1956	21,700	20,620	21.8	449.3	17,077	15,615	693	5,407
1957	21,938	20,857	23.2	483.4	14,310	13,558	680	4,609
1958	25,108	23,993	24.2	580.2	12,379	11,849	810	4,798
1959	23,349	22,631	23.5	532.9	15,833	15,117	793	5,991
1960	24,440	23,655	23.5	555.1	16,080	15,309	769	5,886
1961	27,787	27,003	25.1	678.6	16,588	15,634	765	5,978
1962	28,418	27,608	24.2	669.2	16,293	15,569	789	6,139
1963	29,462	28,615	24.4	699.2	14,843	14,212	871	6,192
1964	31,721	30,793	22.8	700.9	14,836	14,055	888	6,237
1965	35,227	34,449	24.5	845.6	14,152	13,613	894	6,087
1966	37,294	36,546	25.4	928.5	10,349	9,553	829	3,960
1967	40,819	39,805	24.5	976.4	9,450	7,997	803	3,210
1968	42,265	41,391	26.7	1,107.0	10,913	10,159	913	4,640
1969	42,534	41,337	27.4	1,133.1	11,882	11,051	736	4,068
1970	43,082	42,249	26.7	1,127.1	11,945	11,155	729	4,068
1971	43,472	42,701	27.5	1,176.0	12,355	11,471	740	4,240
1972	46,885	45,698	27.8	1,270.6	14,001	12,984	838	5,440
1973 2/	57,297	56,416	27.8	1,566.5	12,501	11,989	870	5,216
1974 3/	55,041	54,000	28.5	1,540.0	14,806			

YEAR	FLAXSEED				PEANUTS				TOTAL 4 OILSEEDS
	ACREAGE		PRODUCTION		ACREAGE		PRODUCTION		ACREAGE PLANTED
	PLANTED	HARVESTED	PER ACRE HARVESTED	TOTAL	PLANTED 1/	HARVESTED FOR NUTS	PER ACRE HARVESTED	TOTAL	
	1,000 ACRES	1,000 ACRES	BUSHELS	MIL. BUSHELS	1,000 ACRES	1,000 ACRES	POUNDS	MIL. POUNDS	MIL. ACRES
1950	4,274	4,090	9.8	40.2	2,633	2,262	900	2,035	40.8
1951	4,116	3,904	8.9	34.7	2,510	1,982	837	1,659	51.2
1952	3,445	3,304	9.1	30.2	1,838	1,443	940	1,356	49.3
1953	4,759	4,570	8.2	37.7	1,796	1,515	1,039	1,574	49.8
1954	5,947	5,663	7.3	41.3	1,824	1,387	727	1,008	46.4
1955	5,148	4,914	8.2	40.4	1,882	1,669	928	1,548	44.7
1956	5,786	5,473	8.6	47.0	1,834	1,384	1,161	1,607	46.4
1957	5,481	4,793	5.2	25.1	1,746	1,481	969	1,436	43.5
1958	3,862	3,679	10.2	37.4	1,702	1,516	1,197	1,814	43.1
1959	3,268	2,932	7.2	21.2	1,576	1,435	1,061	1,523	44.0
1960	3,437	3,342	9.1	30.4	1,526	1,395	1,232	1,718	45.5
1961	2,975	2,514	8.8	22.2	1,524	1,398	1,185	1,657	48.9
1962	3,102	2,808	11.5	32.2	1,507	1,400	1,228	1,719	49.3
1963	3,379	3,172	9.8	31.0	1,498	1,396	1,391	1,942	49.2
1964	2,965	2,825	8.6	24.4	1,487	1,397	1,502	2,099	51.0
1965	2,868	2,775	12.8	35.4	1,520	1,438	1,661	2,390	53.8
1966	2,679	2,576	9.1	23.4	1,490	1,421	1,700	2,416	51.8
1967	2,061	1,975	10.1	20.0	1,474	1,404	1,765	2,477	53.8
1968	2,177	2,092	12.9	27.0	1,496	1,438	1,770	2,547	56.9
1969	2,661	2,605	13.4	34.9	1,512	1,456	1,742	2,535	58.6
1970	2,963	2,848	10.4	29.5	1,515	1,467	2,031	2,979	59.5
1971	1,627	1,545	11.8	18.2	1,529	1,454	2,066	3,005	59.0
1972	1,191	1,151	12.1	13.9	1,533	1,486	2,203	3,275	63.6
1973 2/	1,777	1,725	9.5	16.4	1,541	1,500	2,299	3,448	73.1
1974 3/	1,790	1,725	11.5	20.0	1,525	1,485	2,360	3,500	73.2

1/ ACREAGE GROWN ALONE FOR ALL PURPOSES.

2/ PRELIMINARY.

3/ INDICATED MARCH 1.

payments or the large part of the corn crop used on farms where grown.

Supplies a Record; Carryover To Increase

Soybean supplies this marketing year total a record 1,626 million bushels, around a fifth above the previous season. The increase is due to increased output as carryover stocks were at a low level. The 1973 soybean crop totaled 1,566 million bushels, nearly 300 million above the previous record in 1972. Supplies are more than adequate to meet requirements, allowing for buildup in stocks.

Total soybean disappearance is expected to increase about 100 million bushels to 1.4 billion, a new record. Tight edible oil supplies and strong demand for soybean oil are expected to keep crushings at a record clip and soybean exports also are expected to set a new record. Crushings and exports through February were about at year ago levels so the entire increase projected for 1973/74 will occur this March-August. However, total use will fall short of output, resulting in an increase in carryover stocks this coming September to around 240 million bushels, well above the 60 million bushels of last September 1. This would be the second largest carryover of record, surpassed only by the 327 million bushels of September 1, 1969. However, the carryover this fall will be composed entirely of "free stocks," in contrast to earlier when about 95% of the 327 million bushels was in government hands.

Through February, farmers placed 123 million bushels of soybeans under loan, compared with 89 million for this same period a year ago. Although prices are 2½ times the support level, farmers are using the loan program for interim financing and a means of holding beans for sale later on. So far they have redeemed 31 million bushels, leaving 92 million still under loan. Price support loans are available on 1973-crop soybeans at a national average rate of $2.25 per bushel (No. 1 grade, 12.8-13.0% moisture), unchanged from the past 4 years. Farm and warehouse loans and CCC purchases are available from harvest through May 31, 1974. No CCC acquisitions are expected this season. There will be no reseal program. Currently CCC does not own any soybeans. The soybean loan level will continue at $2.25 per bushel for the 1974 crop.

Crushings Increasing

Soybean crushings this season are heading for a new record of an estimated 775 million bushels, up sharply from the 722 million of last season. Through February they totaled 393 million bushels, about the same as a year ago, reflecting tight supplies early in the marketing year. However, the crush has picked up strongly in recent months, reaching 75 million bushels, an alltime monthly record in January. February totaled 70 million, about 5 million above last February, and March is estimated at around 75 million, some 10 million above last year.

Over the balance of the season crushings are expected to continue large, totaling sharply above the 328 million bushels of last March-August when supplies were tight and prices extremely high. Strong domestic demand for soybean oil and ample supplies of beans are major determinants of the record crush this year.

. A new rule proposed by the Federal Energy Office on March 27 and published in the Federal Register of March 29 would give a priority to hexane use as a solvent. This should assist oilseed processors to secure the hexane needed for oil extraction. A few soybean processors have experienced difficulty in obtaining hexane for current operations as well as for starting up new plants. Also, soybean oil refining and hydrogenation facilities reportedly are running near capacity. Should these problems become widespread they could adversely affect crushings, even though crushing capacity is more than adequate to meet current requirements. The estimated U.S. annual soybean processing capacity now approximates 1 billion bushels.

Yield of oil from crushed soybeans is up slightly from last year. So far oil yield per bushel averages about 10.66 pounds, compared with 10.53 pounds a year ago. Meal outturns average 47.0 pounds, not much changed from 1972/73.

Processing margins this season through February averaged about $1 per bushel, well above the 58¢ of a year ago. Spot margins fell in March to less than 50¢ reflecting lower market prices for products. Record average margins of 59¢ per bushel were set last season. These margins are measured by spot prices for soybeans, oil and meal at Decatur.

Exports Same As Last Year; Sharp Gains In Prospect

Soybean exports this season are estimated at 525 million bushels, compared with 480 million in 1972/73. Exports through March were about even with a year ago. However, the tempo is expected to increase, especially this summer. During July-September 1973 shipments abroad were limited by small supplies and the export control program. Thus, exports got off to a slow start this season, due mainly to small soybean supplies and after effects of the control program. Continuing good demand for soybean meal from expanding world livestock and poultry production is expected to boost exports. Western Europe and Japan will be major buyers. Also, the Peoples Republic of China is a major buyer of U.S. soybeans for the first time this year, reportedly taking a total of around 33 million bushels. About 13 million bushels have been shipped.

TABLE 3.--SOYBEANS: PROSPECTIVE PLANTINGS FOR 1974 WITH COMPARISONS, BY STATES AND AREAS, CROP YEARS, 1971-74

STATE AND AREA	ACREAGE PLANTED				ACREAGE HARVESTED				PRODUCTION			
	ACTUAL			INDICATED 1974 2/								
	1971	1972	1973 1/		1971	1972	1973 1/	INDICATED 1974 2/	1971	1972	1973 1/	INDICATED 1974 2/
	1,000 ACRES								MILLION BUSHEL			
NORTH CAROLINA	1,110	1,250	1,550	1,550	990	1,165	1,500		23.8	29.1	36.0	
SOUTH CAROLINA	1,110	1,130	1,300	1,340	1,070	1,080	1,250		23.0	20.0	23.8	
GEORGIA	620	720	970	1,120	600	670	950		15.3	10.0	20.0	
ALABAMA	680	830	950	1,050	655	800	920		17.0	16.0	19.3	
TOTAL SOUTHEAST	3,520	3,930	4,770	5,060	3,315	3,715	4,620		79.1	75.1	99.1	
KENTUCKY	734	983	1,180	1,280	705	924	1,140		20.8	24.9	29.1	
TENNESSEE	1,283	1,411	1,640	1,640	1,219	1,298	1,570		31.7	28.6	36.9	
MISSISSIPPI	2,713	2,580	2,830	2,780	2,632	2,464	2,750		56.6	48.0	60.5	
ARKANSAS	4,350	4,140	4,700	4,400	4,300	4,050	4,650		92.4	81.0	116.2	
LOUISIANA	1,695	1,712	1,760	1,740	1,644	1,667	1,720		39.5	38.3	36.7	
TOTAL SOUTH CENTRAL	10,775	10,826	12,110	11,840	10,500	10,403	11,830		241.0	220.8	281.4	
OHIO	2,647	3,070	3,620	3,330	2,634	3,010	3,590		80.3	79.8	89.8	
INDIANA	3,400	3,740	4,310	4,150	3,377	3,688	4,290		111.4	108.8	135.1	
ILLINOIS	7,190	7,600	9,300	8,550	7,150	7,520	9,230		236.0	259.4	290.7	
IOWA	5,516	6,050	7,950	7,500	5,500	6,000	7,900		178.8	216.0	268.6	
MISSOURI	3,652	4,050	4,800	4,250	3,605	3,960	4,700		97.3	108.9	126.9	
MINNESOTA	2,820	3,250	4,420	4,350	2,780	3,225	4,390		63.9	90.3	127.3	
TOTAL EASTERN CORN BELT	25,225	27,760	34,400	32,130	25,046	27,403	34,100		767.7	863.2	1,038.4	
NORTH DAKOTA	211	200	236	224	208	190	233		2.9	3.9	5.5	
SOUTH DAKOTA	235	260	416	410	232	253	411		4.9	7.3	9.9	
NEBRASKA	618	715	1,230	1,320	609	707	1,210		15.2	23.0	36.3	
KANSAS	880	900	1,240	1,150	871	875	1,200		17.9	24.5	26.4	
TOTAL WESTERN CORN BELT	1,944	2,075	3,122	3,104	1,920	2,025	3,054		40.9	58.7	78.1	
ALL OTHERS 3/	2,008	2,294	2,895	2,907	1,920	2,152	2,812		47.3	52.8	69.5	
UNITED STATES	43,472	46,885	57,297	55,041	42,701	45,698	56,416	54,000	1,176.0	1,270.6	1,566.5	1,540

1/ PRELIMINARY. 2/ MARCH 1 INDICATIONS. 3/ NEW YORK, NEW JERSEY, PENNSYLVANIA, MICHIGAN, WISCONSIN, DELAWARE, MARYLAND, VIRGINIA, FLORIDA, OKLAHOMA AND TEXAS.

TABLE 4.--SOYBEANS: SUPPLY, DISPOSITION, ACREAGE AND PRICE, 1965-74

ITEM	YEAR BEGINNING SEPTEMBER									
	1965	1966	1967	1968	1969	1970	1971	1972	1973 1/	1974 2/
	- - SUPPLY AND DISPOSITION - - (MILLION BUSHELS)									
SUPPLY										
STOCKS, SEPTEMBER 1	29.7	35.6	90.1	166.3	326.8	229.8	98.8	72.0	59.6	240.0
PRODUCTION	845.6	928.5	976.4	1,107.0	1,133.1	1,127.1	1,176.0	1,270.6	1,566.5	1,540.0
TOTAL SUPPLY	875.3	964.1	1,066.5	1,273.3	1,459.9	1,356.9	1,274.8	1,342.6	1,626.1	1,780.0
DISPOSITION										
CRUSHINGS	537.5	559.4	576.4	605.9	737.3	760.1	720.5	721.8	775.0	825.0
EXPORTS	250.6	261.6	266.6	286.8	432.6	433.8	416.8	480.2	525.0	575.0
SEED	42.8	47.1	48.6	47.3	48.5	48.1	51.0	58.2		
FEED	.9	.9	.9	.9	.9	1.1	1.1	1.2	86.0	90.0
RESIDUAL	7.9	5.0	7.7	5.6	10.8	15.0	13.4	21.6		
TOTAL DISPOSITION	839.7	874.0	900.2	946.5	1,230.1	1,258.1	1,202.8	1,283.0	1,386.0	1,490.0
STOCKS, AUGUST 31	35.6	90.1	166.3	326.8	229.8	98.8	72.0	59.6	240.0	290.0
	- - ACREAGE AND YIELD - - (MILLION ACRES)									
ACREAGE PLANTED	35.2	37.3	40.8	42.3	42.5	43.1	43.5	46.9	57.3	55.0
ACREAGE HARVESTED FOR BEANS	34.4	36.5	39.8	41.4	41.3	42.2	42.7	45.7	56.4	54.0
PERCENT HARVESTED (%)	97.7	97.9	97.5	97.9	97.2	97.9	98.2	97.4	98.4	98.2
	(BUSHELS)									
YIELD PER ACRE HARVESTED	24.5	25.4	24.5	26.7	27.4	26.7	27.5	27.8	27.8	28.5
	- - PRICE - - (DOLLARS)									
PRICE PER BUSHEL										
SUPPORT (U.S. FARM BASIS) 3/	2.25	2.50	2.50	2.50	2.25	2.25	2.25	2.25	2.25	2.25
RECEIVED BY FARMERS	2.54	2.75	2.49	2.43	2.35	2.85	3.03	4.37	5.65	
NO. 1 YELLOW, ILL. PTS.	2.91	2.86	2.61	2.54	2.53	3.00	3.24	6.22		
NO. 1 YELLOW, CHICAGO	2.98	2.93	2.69	2.63	2.61	3.05	3.29	6.26		

1/ PRELIMINARY. DISPOSITION IS FORECAST. 2/ FORECAST. ACREAGE AND PRODUCTION BASED ON MARCH 1 PLANTING INTENTIONS. 3/ BEGINNING 1969 NO. 1 GRADE SOYBEANS. PRIOR YEARS NO. 2 GRADE. DIFFERENTIAL BETWEEN NO. 1 GRADE AND NO. 2 ABOUT 5¢ PER BUSHEL.

As of mid-March, outstanding export sales of soybeans totaled 290 million bushels. Most of these were destined for Western Europe and Japan. About 46 million bushels were for unknown destinations.

The estimate for export this spring and summer assumes no major bottlenecks in shipping that would reduce exports nor any acceleration because of a concern about a possible strike in the fall. The many uncertainties created by the petroleum shortage could affect soybean movement. Although the embargo has been lifted, it will take some time before many of these problems are resolved.

SOYBEAN OIL

Prices High as Domestic Use Expands

Soybean oil supplies total 9 billion pounds, about a tenth above 1972/73. The increase results from larger production, as starting stocks last fall were down.

Domestic use is up sharply from a year ago. Through February it totaled 3.2 billion pounds, up about 10%. This is an average monthly rate of about 650 million pounds, compared to 600 million a year ago. Soybean oil is filling the gap resulting from declining butter and lard production. In addition, some stock buildup of finished products has occurred, as users attempted to replenish rundown inventories and insure against unforeseen developments such as bottlenecks due to hexane shortages or refining or hydrogenation problems. Stocks of soybean oil (crude and refined) on March 1 totaled 638 million pounds, up 122 million from October 1 but 328 million below March 1, 1973. Total domestic use for the season is estimated at 7.2 billion pounds, about 8% above last year.

Soybean oil exports are expected to total around 1.2 billion pounds, slightly above last year. During October-February they totaled 412 million pounds, about a tenth below this same period a year ago. Exports lagged in the early part of the season due to tight soybean oil supplies, high prices, and problems related to containers and transportation. Rate of exports is expected to increase from earlier in the year now that supplies are loosening up and prices are down from recent high levels. However, record exports of U.S. soybeans and improving world fats and oils availabilities later this year are expected to prevent exports from expanding much above last season's level.

Aided shipments under P.L. 480 probably will not vary much from the 430 million pounds exported last year. High soybean oil prices are tending to hold down movement under these programs. As a result, this sector will account for only about one-third of total exports. In recent past years, as much as 85% of total exports moved under these programs.

As of mid-March, outstanding export sales of soybean oil totaled 707 million pounds. About 530 million pounds were identified for known destinations, mostly to the European Community, Iran, Mexico, and South America. About 150 million pounds were for unknown destinations.

Soybean oil prices (crude, Decatur) continue high but have declined some from recent levels. Prices rose from around 20½¢ last November to an alltime peak of 36½¢ in February. Subsequently they turned down, averaging 31¢ in March. During October-March they averaged 27¢ per pound, compared with about 11¢ for this same period last year. The softer prices reflect the currently increasing soybean oil production, some catch-up with the strong domestic demand, and a looser soybean oil supply and demand outlook over the next 1½ years. However, prices are still expected to continue in a relatively high range and for the season average sharply above the 16½¢ of 1972/73.

1974/75 Supplies May Increase

Based on 1974 soybean production as indicated by March intentions, soybean oil supplies in the 1974/75 marketing year beginning in October would total about 9½ billion pounds, about 5% above current supplies. Total disappearance would be expected to approach 8.6 billion pounds, about 2% above this season. Domestic use would increase to nearly 7½ billion pounds, up about 3%. However, exports probably would continue at around the one billion pound level. This would result in ending stocks on September 30, 1975, up sharply from the 0.5 billion of last September and the 0.6 billion now expected for September 30, 1974.

SOYBEAN MEAL

Domestic Use Up; Prices Off

Due to increased production, soybean meal supplies this marketing year total just under 19 million tons, about a tenth above the previous season.

Domestic use is expected to total around 13 million tons, about a tenth above last season. Some increases in cattle and poultry numbers along with stepped-up feeding rates are expected to boost the total used for feed. Lower prices and larger supplies augur for increased usage. Through February, disappearance totaled 5.8 million tons, about 2% above this period last season. Use over the rest of the marketing year is expected to total well above the 6.2 million tons of last March-September, when prices reached record high levels.

Soybean meal exports probably will total around 5½ million tons, up significantly from the record 4.7 million tons of last year. Through February they totaled 2.3 million tons, slightly above this period a year ago. However, volume over the balance of the season is expected to run well ahead of the 2.5 million

TABLE 5.--FOOD FATS AND OILS: SUPPLY, DISPOSITION, AND PER CAPITA DISAPPEARANCE, 1965-74

ITEM	YEAR BEGINNING OCTOBER									
	1965	1966	1967	1968	1969	1970	1971	1972 1/	1973 2/	1974 PROJECTED
	- - MILLION POUNDS - -									
STOCKS, OCTOBER 1										
BUTTER	161	68	212	197	155	171	222	178	94	70
LARD	62	64	107	94	56	60	77	44	28	28
TALLOW, EDIBLE	22	40	70	39	26	37	63	36	19	21
CORN OIL	35	55	47	41	71	60	58	70	57	47
COTTONSEED OIL	236	202	207	99	377	121	94	114	114	164
SOYBEAN OIL	297	462	596	540	415	543	773	785	516	616
PALM OIL	10	17	13	28	28	20	36	93	60	45
PEANUT OIL	18	34	31	14	17	12	24	18	18	18
SAFFLOWER OIL	35	50	60	76	61	29	29	39	31	31
SUB-TOTAL	876	992	1,343	1,128	1,206	1,054	1,376	1,377	937	1,040
FINISHED PRODUCTS 3/	197	224	256	231	217	236	236	254	206	
TOTAL FOOD FATS AND OILS	1,073	1,216	1,599	1,359	1,423	1,290	1,612	1,631	1,143	
IMPORTS										
BUTTER	4	2	2	2	2	2	2	2	57	
TALLOW, EDIBLE	1	1	2	4/	4/	4/	4/	1	2	
OLIVE OIL	47	55	60	58	63	67	67	58	65	
CORN OIL	10	2	9	8	3	1	---	4/	---	
COTTONSEED OIL	---	17	13	4/	4/	4/	---	4/	---	
PALM OIL	41	89	72	161	122	207	440	363	350	
PEANUT OIL	4/	---	4/	4/	4/	4/	4/	4/	---	
SESAME OIL	2	1	1	2	2	2	2	2	2	
TOTAL	104	167	159	231	191	279	511	426	476	
PRODUCTION										
BUTTER	1,120	1,235	1,185	1,139	1,129	1,148	1,121	962	825	
LARD	1,900	2,066	2,067	1,969	1,833	2,044	1,667	1,302	1,150	
TALLOW, EDIBLE	551	597	540	520	566	550	523	481	475	
OLEO OIL & STEARINE 5/	12	14	6	6	11	4	5	8	---	
CORN OIL	449	446	442	467	474	485	499	523	550	
COTTONSEED OIL	1,830	1,223	1,020	1,450	1,251	1,235	1,308	1,564	1,700	
SOYBEAN OIL	5,800	6,076	6,032	6,531	7,904	8,265	7,892	7,501	8,500	
PEANUT OIL	163	175	198	199	180	266	265	273	250	
SAFFLOWER OIL (ESTIMATE)	138	170	139	100	100	120	140	150	150	
SUB-TOTAL	11,963	12,001	11,629	12,381	13,448	14,117	13,420	12,764	13,600	
OILSEEDS (OIL EQUIVALENT OF EXPORTS)	2,940	3,050	3,078	3,210	5,007	4,857	4,556	5,307	6,150	
TOTAL SUPPLY	16,080	16,435	16,465	17,181	20,069	20,543	20,099	20,128	21,369	
EXPORTS AND SHIPMENTS										
BUTTER	24	7	31	37	8	27	124	18	6	
LARD	218	247	246	282	405	382	220	132	100	
TALLOW, EDIBLE	3	5	6	8	11	6	5	20	25	
OLEO OIL & STEARINE	12	14	6	6	11	4	5	8	---	
CORN OIL	---	18	25	29	34	43	49	44	35	
COTTONSEED OIL	275	78	51	141	453	373	453	584	550	
PALM OIL (RE-EXPORTS ESTIMATE)	---	---	---	---	5	5	27	29	15	
PEANUT OIL	14	6	4	28	34	60	71	111	75	
PROCESSED FOOD OILS 6/	64	76	59	61	63	67	43	39	50	
SAFFLOWER OIL (ESTIMATE)	---	---	---	---	25	20	40	40	50	
SOYBEAN OIL	948	1,105	993	899	1,449	1,782	1,440	1,088	1,200	
SUB-TOTAL	1,558	1,557	1,427	1,490	2,498	2,769	2,477	2,113	2,106	
OILSEED (OIL EQUIVALENT)										
COTTONSEED	3	2	1	1	9	12	1	3	25	
SOYBEANS	2,764	2,930	2,972	3,148	4,941	4,764	4,429	5,199	6,000	
PEANUTS (FOR CRUSHING ABROAD)	43	47	28	9	12	58	71	56	75	
SAFFLOWER	130	71	77	52	45	23	55	49	50	
SUB-TOTAL	2,940	3,050	3,078	3,210	5,007	4,857	4,556	5,307	6,150	
TOTAL EXPORTS	4,498	4,608	4,505	4,700	7,505	7,626	7,033	7,420	8,256	
DOMESTIC DISAPPEARANCE										
BUTTER	1,193	1,088	1,172	1,146	1,106	1,075	1,043	1,030	900	
LARD	1,676	1,781	1,834	1,726	1,425	1,645	1,480	1,186	1,050	
TALLOW, EDIBLE	530	563	567	526	544	518	546	479	450	
CORN OIL	439	438	432	416	454	445	439	492	525	
COTTONSEED OIL	1,590	1,157	1,090	1,031	1,052	890	834	980	1,100	
SOYBEAN OIL	4,687	4,837	5,096	5,756	6,328	6,253	6,439	6,682	7,200	
OLIVE OIL	47	55	60	58	63	67	67	58	65	
PALM OIL	34	93	57	161	125	186	355	367	350	
PEANUT OIL	133	172	211	168	151	193	200	162	175	
SAFFLOWER OIL (ESTIMATE)	123	159	124	115	107	100	90	118	100	
SESAME OIL	2	1	1	2	2	2	2	2	2	
PROCESSED FOOD OILS 6/	-64	-76	-59	-61	-63	-67	-43	-39	-50	
TOTAL	10,390	10,268	10,585	11,044	11,294	11,306	11,452	11,517	11,867	
TOTAL (CALCULATED NET) 7/	10,363	10,236	10,610	11,058	11,275	11,306	11,434	11,566	11,800	
TOTAL USE FOR FOOD 8/	10,044	10,030	10,316	10,590	10,988	11,057	11,145	11,298	11,600	
	- - POUNDS - -									
PER CAPITA DISAPPEARANCE										
BUTTER (FAT CONTENT)	4.9	4.4	4.7	4.6	4.4	4.2	4.1	4.0	---	
MARGARINE (FAT CONTENT)	8.3	8.6	8.5	8.5	8.7	8.7	8.9	9.0	---	
LARD (DIRECT USE)	5.7	5.4	5.4	5.2	4.5	4.6	3.7	3.5	---	
BAKING AND FRYING FATS	16.0	15.7	16.1	16.7	17.6	17.0	16.6	16.4	---	
SALAD AND COOKING OILS	13.0	12.8	13.2	14.0	15.0	15.6	16.9	17.6	---	
OTHER EDIBLE USES	2.2	2.5	2.4	2.3	2.6	2.3	2.4	2.5	---	
TOTAL (FAT CONTENT)	50.1	49.5	50.4	51.3	52.8	52.5	52.5	52.8	54.0	

1/ PRELIMINARY. 2/ FORECAST EXCEPT OCTOBER 1 STOCKS. 3/ SHORTENING, MARGARINE (FAT CONTENT), AND SALAD AND COOKING OILS. 4/ LESS THAN 500,000 POUNDS. 5/ REPRESENTS EXPORTS ONLY; PRODUCTION DATA ARE NOT AVAILABLE. 6/ INCLUDES EXPORTS OF PROCESSED FOOD OILS NOT CLASSIFIED BY KIND, SHORTENING AND OTHER SECONDARY FATS. 7/ ADJUSTED TO REFLECT CHANGES IN STOCKS OF FINISHED PRODUCTS. 8/ EXLCUDES FOOD FATS AND OILS USED FOR NON-FOOD PURPOSES, BUT INCLUDES NON-FOOD OILS (COCONUT AND PALM KERNEL) USED IN FOOD.

tons last year, when exports were limited by high prices, tight supplies, and the export allocation program. Demand for soybean meal is expected to continue strong due to expanding livestock and poultry numbers.

Exports in the second half of the season will be influenced by exports of soybeans and soybean meal from Brazil and by the availability of Peruvian fish meal. Fishing off the coast of Peru began in early March and by late March the quota of 500,000 tons had been reached. Operations were then halted for further study of the situation. Should operations continue beyond the 500,000 tons, the catch for the balance of the current soybean meal marketing year will continue to be limited under quotas. Annual catches in recent years averaged about 10 million tons of fish but were down to about 4½ million in 1972 and 2 million in 1973.

As of mid-March, outstanding export sales of soybean meal totaled 3.5 million metric tons. Most of the 2.5 million tons identified were destined for Western and Eastern Europe. About 1.0 million tons were for unknown destinations.

Soybean meal prices (44% protein, Decatur) in March averaged $149 per ton, the lowest since November 1972. Prices have declined irregularly from the record $412 of last June. During October-March, they averaged $167, near the level for this same period a year ago. The sharp drop reflects increased soybean meal production in recent months and a more ample supply relative to demand. Prices are not expected to change much during the balance of the season. They will average sharply below the $289 of last April-September.

Production and Use May Expand Next Season

Based on the current outlook for 1974 soybean production, soybean meal supplies in the 1974/75 marketing year, beginning in October, would be just under 20 million tons, or about 5% above the estimate for the current year. Domestic use is projected at around 14 million tons, about 1 million above this season. Exports probably would increase slightly above the 5½ million tons estimated for this year.

COTTONSEED

Crushings Up Slightly

Cottonseed crushings so far this marketing year total 2.8 million tons, about the same as last season. For the season they are expected to total about 5 million tons, a little above last year. Although 1973 cottonseed production was below the previous year, crushings are expected to be a little larger, due to the greater seed carryin. This would produce around 1.6 billion pounds of cottonseed oil and 2.3 million tons of cottonseed meal.

Through February cottonseed oil mills had received nearly 90% of the 1973 crop, roughly the same as a year ago. Stocks of seed at oil mills on March 1 were 2.2 million tons, unchanged from this time last season.

Cottonseed prices to farmers for the 1973 crop averaged $100 per ton, about double a year ago.

COTTONSEED OIL

Prices at Peak Levels

Cottonseed oil prices (crude, Valley) so far this season are averaging around 27¢ per pound, more than double those of a year ago and the highest for any comparable period on record. Prices drifted downward from 32¢ a pound last August to around 20¢ in November. Thereafter they began rising again, reaching a peak of 35¢ in February. Prices retreated some in March, averaging 32¢ per pound. Exceptionally strong demand for vegetable oils is a major factor behind these high prices. Prices are expected to continue high but may decline some from current levels. However, they are expected to average sharply above the 18¢ level of April-July 1973.

Cottonseed oil supplies total 1.8 billion pounds, about 3% above the previous year. Domestic use for the year likely will total around 1.1 billion pounds, up about a tenth. Through February, use totaled 0.7 billion pounds, compared with 0.5 billion for the comparable period last year. Usage is up in all the major categories. Cottonseed oil is in strong demand to help fill the shortfalls in butter and lard production and to meet increasing requirements for use in vegetable oil products such as margarine and shortening.

Exports may total around 0.5 billion pounds, down from the 0.6 billion of last year. So far they total 0.2 billion pounds compared with around 0.3 billion a year ago. Volume is down sharply for Western Europe and Egypt, our two most important markets. However, Mexico is taking more this year, due to its smaller domestic production.

As of mid-March, reported outstanding export sales of cottonseed oil totaled around 300 million pounds. Egypt, Japan, and Western Europe were major destinations. About 61 million pounds were for unknown destinations.

COTTONSEED MEAL

Prices Off Sharply

Cottonseed meal prices (41% protein, expeller, Memphis) are down sharply from earlier in the season. During March they averaged around $115 per ton, down about two-fifths from last December. The steep slide in recent months reflects the better balanced supply/demand outlook for oilseed meals this season. For the August-March period they averaged $157, compared with $127 for this same period a year ago. Prices over the balance of the marketing year are expected to average sharply below the $180 per ton of the same period a year earlier.

Cottonseed meal supplies total 2.4 million tons, about 2% above last year. Domestic use likely will total around 2.2 million tons. Lower prices should encourage stepped-up feeding. Cottonseed meal stocks at oil mills on March 1 totaled 108,000 tons, up from the 52,000 of last March.

LARD

Production and Use Down

Lard production during 1973/74 is expected to total about 1.2 billion pounds, down roughly a tenth from the previous year. Output so far is down by about this rate. Smaller hog slaughter and declining lard yields per hog are behind the reduced output.

Domestic disappearance also will be down and probably will total around 1.1 billion pounds, or about a tenth below last season. Through February use totaled about 450 million pounds compared with 512 million for this period a year ago. Reduced supplies are a limiting factor constraining use this year as prices are competitive in relation to prices of other edible fats and oils.

Lard exports are estimated at about 100 million pounds, down from 126 million in 1972/73. The smaller supplies, entry of the United Kingdom into the European Community, and the termination of the U.S. lard export payment program are restrictive factors. Exports through February totaled 58 million pounds compared with 72 million a year ago. The U.K. has been the only major foreign outlet for U.S. lard in recent years and most of that market is now apparently lost to lard from the Continent. However, U.S. lard still enjoys a certain preference, particularly where tailored for specified markets, such as in conveniently-sized packages.

Lard prices (loose, Chicago) during October-March averaged 25¢ per pound, more than double this same period a year ago. Prices declined from 27¢ last October to around 22¢ in December but moved up again to 28¢ in March. They are expected to continue strong.

PEANUTS

Edible Use Up A Tenth

Use of peanuts in edible products this season is exceptionally strong, averaging about a tenth above a year ago. Use during January-February alone averaged around a fifth higher. The annual average increase in recent years has been around 3%. The increase is due largely to more use in peanut butter manufacture, which is up about 19%. Use in salted peanuts is up 13%, but use is down in peanut candy and peanut butter sandwiches.

High prices for meat, poultry, and American cheese have caused consumers to switch to cheaper protein foods where possible. During 1973, retail prices for those higher priced commodities rose 25%, 40%, and 11%, respectively above the 1972 levels. Peanut butter prices, however, rose only 4%. Also, peanuts have been in plentiful supply, in contrast to tight supplies of other protein foods. Usage is expected to continue well above the rate of recent years over the balance of the current season. Total edible use for the season is expected to be around 1.9 billion pounds, compared with 1.7 billion in 1972/73.

Peanut supplies total 3.9 billion pounds (farmers' stock basis), about 6% above 1972/73. The 1973 crop, a record 3.5 billion pounds, mainly accounts for the large availabilities. Approximately a fourth of this volume was acquired by the CCC under the price support program. This is down some from last season and reflects the strong commercial demand and increased redemptions by farmers. Prices received by farmers this season have averaged about 16¢ per pound, near support but up from the 14.4¢ of last season.

CCC Sales Price Above Support

Because of the strong domestic and export demand, the CCC disposed of the peanuts which it acquired under the price support program at much higher prices this season, thereby reducing its losses significantly. Recent sales for export as edible peanuts were priced above $400 per ton. Those sold for crushing overseas topped $350. This was well above the national average support price of $328.50 and the $315 per ton (effective support) paid by CCC for these peanuts. Losses from price support operations for 1973-crop peanuts are expected to be less than $5 million, compared with around $58 million last year and the record $97 million in 1971. The CCC has sold its entire stock of peanuts.

Peanut crushings through February totaled 422 million pounds (farmers' stock basis), about 7% below this same period last year. Crushings for the season are expected to total about 0.8 billion pounds, near last season's level. A larger volume is being exported this season which may prevent crushings from increasing from last year.

Exports through February totaled 0.3 billion pounds, almost one-third above a year ago. Strong world demand for peanuts (and vegetable oils in general) and the reduction in African production are major factors behind the heavy movement. Exports for the season are estimated at the 0.6 billion pound level, compared with 0.5 billion last season.

FLAXSEED

Prices At Record Levels

Flaxseed prices received by farmers escalated from $6 per bushel last July to $11 in March, averaging $8 for the period, sharply above the $3 for this same period a year ago. March prices were the highest on record. Tight flaxseed and linseed oil supplies in this country and abroad account for the peak prices. They are expected to continue high thoughout 1974 as the U.S. supply/demand balance remains in a precarious position. The current support price is $2.50 per bushel.

Flaxseed supplies for the year ending June 30 total 20 million bushels, about two-fifths below last season and the smallest of record. Smaller starting stocks account for the decline as 1973 production was up about 18%. The carryover last summer of 4 million bushels was the smallest in over a decade.

Because of the tight supply, crushings are expected to total only around 16 million bushels, down from 20 million in 1972/73. Through February they totaled 12 million bushels, about 1½ million below the comparable period a year ago. Monthly crushings this season have trailed last year except in October and the rate is expected to drop sharply over the balance of the marketing year.

Exports may be near one-half million bushels, down sharply from the 9 million of last season. Through February only about 0.3 million had been exported. Short supplies are limiting exports. World demand is strong and more could be moved if available.

Ending stocks on June 30 likely will be drawn down to 2 million bushels, even lower than last June. This is near minimal levels and represents a significant shift in stock levels from the record 27 million bushels of June 30, 1971. Since that date, CCC has disposed of all its stocks of flaxseed and linseed oil, resulting in the currently low levels.

LINSEED OIL

Prices At Peak Levels

Linseed oil production for the year ending June 30 is estimated to be down to nearly 300 million pounds, about a fifth below last year. Production during July-February totaled 237 million pounds or about 12% below this same period a year ago. Output over the rest of the marketing year is expected to be down sharply due to declining crushings.

Domestic use is estimated at 230 million pounds, down from the 294 million of 1972/73. Limited supplies and high prices probably are affecting use. Both domestic and foreign buyers are bidding for the short supplies this season.

Exports probably will total around 150 million pounds. While this is off sharply from the 263 million of last year, most of last year's exports were from CCC stocks while this year they are all commercial sales. Through February, about 112 million pounds had been shipped, compared with 183 million for this same period a year ago.

As of mid-March, outstanding export sales of linseed oil totaled 33 million pounds. Most of this was destined for the European Community with smaller quantities to Japan and other regions.

The short supplies are expected to result in another draw-down in carryover stocks on July 1—probably to around 50 million pounds. This would be roughly one-half the level of last July 1.

Linseed oil prices (raw, tanks, New York) are at record levels—hitting an alltime high of 46¢ per pound in March. Prices moved up steadily from around 17¢ per pound last July to the current levels. During this period they averaged 33¢, nearly 3 times the level for the same period a year ago. Prices are expected to continue high and will average sharply above the 15¢ level of last April-June.

However, linseed meal prices (34% solvent, bulk, Minneapolis) are down sharply from their high of last summer. Prices declined from $231 per ton last August to $137 in October. They strengthened in December and January but have weakened again, averaging around $138 for March. Domestic use is expected to be around 160,000 tons, compared with about 200,000 last year. Exports may total around 130,000 tons compared with 173,000 last season.

INEDIBLE TALLOW

Output Near Last Year's Level; Prices Strong

Inedible tallow and grease production in 1973/74 may approximate the 4.9 billion pounds of 1972/73. During October-February output totaled 2.0 billion pounds, slightly below the same period a year ago.

Domestic use probably will total near the 2.6 billion pounds of last season. So far it is up slightly, but over the rest of the season it is not expected to be much changed from last year.

Exports probably will match the 2.3 billion pounds of last season. Through February they totaled 967 million pounds, down about 2% from this same period last year. The export situation is still clouded, due to the many uncertainties created by the energy crisis and the heavy demands put upon inland and ocean shipping facilities.

Tallow prices (bleachable, fancy, Chicago) are high. During October-March they averaged 18¢ per pound, sharply above the 8¢ for this period last year. Prices are more stable this season. Although expected to continue high the rest of the marketing year, prices are not expected to fluctuate as wildly as a year ago when they jumped from 12¢ in April to 24¢ in August. However, for the entire season they will average sharply above the 13¢ of 1972/73.

U.S. FOREIGN TRADE

U.S. exports of fats and oils (including oil equivalent of oilseeds) in calendar 1973 reached 10.5 billion pounds, about 2% below 1972 and 4% below the record set in 1971. Imports also set a new record at 1.8 billion, up slightly from 1972. This gave the United States a favorable net trade balance of 8.7 billion pounds down from 8.9 billion in 1972 and the 1971 record of 9.4 billion pounds. See table 6.

The decline in exports mainly reflects smaller movement of soybean oil, flaxseed, peanuts and lard. More butter and coconut oil accounted for the rise in imports. The United States has been a continuous net exporter of fats and oils since 1949.

U.S. exports of oilseed meal (including meal equivalent of oilseeds) in 1973 totaled a record 17.0 million tons, 12% above 1972. About two-thirds of this volume was in the form of soybeans and most of the balance was soybean meal. A large part of the total went to Western Europe. Imports of vegetable protein meals (including meal equivalent of oilseeds) totaled 115,400 tons, up about 4% from 1972. Copra imports (meal equivalent) accounted for the greater part of this total. Fish meal imports totaled only 68,800 tons, down sharply from the 392,000 tons of 1972. Problems associated with the Peruvian fish catch mainly accounted for the sharp decline in these imports.

Fats and Oils Statistical Tables Now Being Automated

Statistical data for oilseeds, fats and oils are now in the process of being automated. Several series which are regularly published in the *Fats and Oils Situation* appear in this issue in their new format. Eventually, all of the series will be transferred to automatic data processing systems and published in this manner. The new process adds greater uniformity, clarity, and accuracy to the series and will make them easier to read.

Table 6 .--Imports and exports of fats, oils, oil-bearing materials, fat-and-oil products (in terms of oil) and oilmeals, averages 1961-65, 1966-70 and calendar years 1971-73

Item	Imports for consumption					Exports 1/				
	Average 1961-65	Average 1966-70	1971	1972	1973	Average 1961-65	Average 1966-70	1971	1972	1973 3/
	Million pounds									
Food fats and oils										
Butter	2.3	2.2	2.1	2.2	45.0	71.8	20.4	99.0	53.6	3.8
Lard	2/	2/	.5	.3	2/	528.1	289.7	344.6	189.1	113.3
Beef fats	.6	1.0	.1	.5	.5	10.3	16.2	10.5	19.3	22.2
Total, edible animal fats	2.9	3.2	2.7	3.0	45.5	610.2	326.3	454.1	262.0	139.3
Corn oil	11.8	6.4	.6	2/	2/	---	23.0	43.1	49.7	20.6
Cottonseed oil	2/	5.9	2/	.2	---	453.4	192.2	402.0	477.4	546.0
Cottonseed (17 percent)	---	---	---	---	---	2.5	3.4	12.3	1.2	4.5
Olive oil, edible	52.1	57.6	61.7	67.1	59.9	---	---	---	---	---
Palm oil	25.6	108.8	216.9	431.1	387.1	---	---	---	---	---
Peanut oil	1.1	2/	2/	2/	2/	31.8	16.9	85.2	61.2	103.7
Peanuts, shelled (43.5 percent)	---	---	---	---	---	13.6	24.3	62.6	132.0	53.4
Soybean oil	---	2/	2/	---	2/	1,080.2	1,099.3	1,765.8	1,349.9	967.4
Soybeans (18.3 percent)	2/	2/	2/	2/	.1	1,994.6	3,424.5	4,663.7	4,848.5	5,351.3
Safflower seed (36 percent)	---	---	---	---	---	26.7	65.8	40.2	33.5	53.1
Other vegetable oils	12.5	18.4	23.5	24.4	26.8	31.2	7.4	12.2	10.1	5.4
Total, edible vegetable oils	103.1	197.1	302.7	522.8	473.9	3,634.0	4,856.8	7,087.1	6,963.5	7,105.4
Soap fats and oils										
Tallow, inedible	1.3	5.0	4.9	1.6	10.1	1,752.2	1,955.5	2,442.5	2,194.0	2,163.2
Greases	.5	.2	2/	2/	.3	207.8	158.9	166.2	160.9	133.8
Fish and fish liver oils non-medicinal	3.5	2.0	1.7	6.4	3.1	155.0	120.2	236.1	193.8	248.2
Marine mammal oils	65.5	53.8	45.6	5.1	2/	4.7	---	---	---	---
Olive oil, inedible	.5	.7	.2	.3	.2	---	---	---	---	---
Total, slow-lathering oils	71.3	61.7	52.4	13.4	13.7	2,119.7	2,234.6	2,844.8	2,548.7	2,545.2
Babassu oil	1.9	4.1	---	---	---	---	---	---	---	---
Coconut oil	318.9	492.0	627.0	677.0	716.9	5.8	9.3	21.6	12.8	24.6
Copra (64 percent)	405.1	361.7	268.6	294.9	280.2	2/	---	---	---	---
Palm kernel oil	84.0	103.3	95.8	101.0	100.7	---	---	---	---	---
Total, lauric-acid oils	809.9	961.1	992.1	1,072.9	1,097.8	5.8	9.3	21.6	12.8	24.6
Drying oils										
Flaxseed (36.1 percent)	2/	2/	1.5	2/	.1	91.0	132.4	8.5	213.4	8.5
Linseed oil	2/	2/	2/	2/	.3	20.9	74.1	46.9	188.0	212.6
Oiticica oil	9.2	7.2	2.7	5.3	4.7	---	---	---	---	---
Tall oil	---	---	---	---	---	39.9	121.7	131.8	178.3	137.4
Tung oil	24.0	21.5	22.2	21.6	21.8	7.4	1.7	2.0	1.3	1.9
Total	33.2	28.7	26.4	26.9	26.9	159.2	329.9	189.2	581.0	360.4
Other industrial oils and fats										
Castor oil	109.5	111.2	76.5	97.5	101.3	.8	---	---	---	---
Fish-liver oils, medicinal	13.8	10.3	13.0	8.8	8.0	.6	---	---	---	---
Rapeseed oil	4.4	8.5	11.1	11.4	13.3	---	---	---	---	---
Wool grease	5.7	6.7	9.7	10.7	9.6	---	---	---	---	---
Other vegetable oils and fats, inedible	5.5	12.8	9.6	9.3	10.1	32.9	75.9	120.0	148.9	160.1
Total	138.9	149.5	119.9	137.7	142.3	34.3	75.9	120.0	148.9	160.1
Products										
Margarine (fat content)	---	---	---	---	---	7.1	10.1	10.8	10.6	2.5
Shortening	---	---	---	---	---	25.4	38.9	30.6	33.2	25.2
Salad products (fat content)	---	---	---	---	---	4.4	10.2	13.6	15.8	11.5
Soap (fat content)	1.9	2.3	2.6	3.0	3.6	20.2	26.1	20.5	22.6	23.6
Fatty acids	6.8	11.1	6.1	10.0	12.4	56.3	87.3	123.1	112.6	106.1
Total	8.7	13.4	8.7	13.0	16.0	113.4	172.6	198.6	194.8	168.9
Grand total	1,168.0	1,414.7	1,504.9	1,789.8	1,816.2	6,676.6	8,005.4	10,915.4	10,711.7	10,503.9
Glycerine	7.8	2.0	.3	1.1	.2	28.0	54.2	69.0	64.0	60.9
Oilseed Cake and Meal:	Thousand tons									
Soybean	---	---	---	---	---	1,447.0	1,491.3	4,573.1	4,037.2	4,866.3
Cottonseed	42.3	4.1	---	.7	5.7	76.3	11.7	36.5	32.9	42.5
Linseed	1.4	.7	2.0	3.0	1.5	53.7	33.6	110.7	174.4	126.6
Copra	8.4	---	---	---	---	---	---	---	---	---
Corn	---	---	---	---	---	.6	2.4	3.2	4.6	39.2
Other	8.7	2.1	3.2	12.9	17.6	10.7	22.3	82.9	76.7	208.0
Total oilmeals	60.8	6.9	5.2	16.6	24.8	1,588.3	1,561.3	4,806.4	4,325.8	5,282.6

1/ Includes re-exports and foreign donations and shipments to U.S. Territories.
2/ Less than 50,000 pounds.
3/ Includes re-exports and foreign donations but not shipments to U.S. Territories.

SOURCE: Bureau of Census.

U.S. FOOD FAT CONSUMPTION TRENDS

by

George W. Kromer

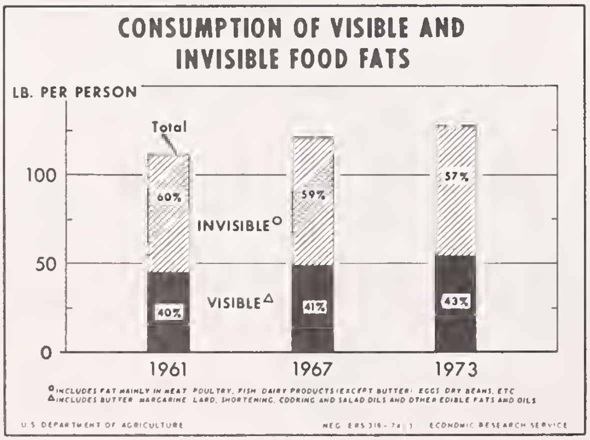
ABSTRACT: U.S. consumption of food fats has increased sharply since the mid-1960's. Increased use of salad and cooking oils, shortening, and margarine has more than offset declines in butter and lard. Soybean oil is extending its lead as the major edible oil and now accounts for nearly three-fifths of all fats and oils going into food products. Apparent consumption of food fats continued at a high level in 1973. Use of visible fats and oils edged up to a record 53½ pounds per person while the invisible forms declined slightly to 72 pounds—chiefly because of the drop in meat consumption.

KEY WORDS: Food fat consumption, fats and oils utilization, nutrient fat, fatty acids.

Americans eat more food fats today despite the attempts by many of us to cut down. Annual consumption of food fats (both visible and invisible) rose from around 114 pounds per person in 1961 to about 127 pounds in 1971 and 1972, a rise of more than 10%. Consumption declined to 125 pounds in 1973, reflecting a 2-pound per capita drop in the invisible fats—mainly reflecting reduced meat consumption.

In analyzing the total fat intake by Americans it is convenient to divide consumption into the so-called "visible and invisible" categories. And we have been eating more of both. Approximately 90% of the nutrient fat in the U.S. diet is in 3 groups of foods—fats and oils; meat, poultry, fish; and dairy products.

Consumption has gone up for the visible kinds (butter, lard, margarine, shortening, cooking and salad oils, and other edible fats and oils), and in 1973 accounted for about 43% of our total fat intake. For invisible fats (dairy products—other than butter—eggs, animal products, various fruits, vegetables, and cereals) consumption has also increased and comprised 57% of the total last year (table 7).


CONSUMPTION OF VISIBLE AND INVISIBLE FOOD FATS

○INCLUDES FAT MAINLY IN MEAT POULTRY, FISH DAIRY PRODUCTS (EXCEPT BUTTER) EGGS DRY BEANS, ETC
△INCLUDES BUTTER MARGARINE LARD, SHORTENING, COOKING AND SALAD OILS AND OTHER EDIBLE FATS AND OILS

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Use of visible food fats rose from 45 pounds (fat content basis) per person in 1961 to about 53½ pounds in 1973. And major shifts occurred within the visible fat groups. We are now eating more margarine, shortening, cooking and salad oils than in earlier years, but less butter and lard.

Consumption of invisible food fats rose from 69 pounds per person in 1961 to 75 pounds in 1971 before declining to 72 pounds by 1973. Much of the increase occurred in the form of fat in meat, poultry, fish and game, which showed a rise from 39 pounds to about 46 pounds in 1971. The rate fell in 1972, and last year consumption was down to 43 pounds. Fat in dairy products (excluding butter) declined from about 17½ pounds per capita in the early 1960's to 16 pounds in recent years.[1]

Trends in the Energy-Yielding Components of Food

We have been eating more of all 3 kinds of food energy (calories)—protein, fat,

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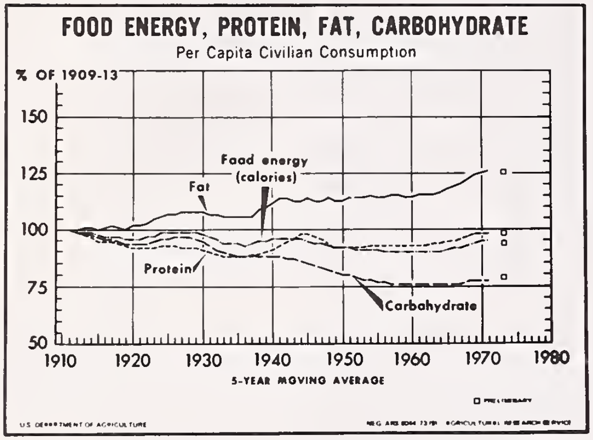
[1] The analysis is based on "disappearance" data as actual consumption data are not available. The Economic Research Service compiles and uses statistics on U.S. food fat production, foreign trade, stocks, and nonfood uses to derive "apparent domestic disappearance." While not a measure of the quantity of fat actually ingested, such estimates are useful for analyzing trends in U.S. consumption.

Table 7.--Civilian consumption of visible and invisible food fats per person, calendar years 1961-73

Source by food group	Pounds per person													
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973 1/	1974
	--Pounds--													
Visible fats 2/														
Butter (fat content)	5.9	5.9	5.5	5.5	5.2	4.6	4.4	4.6	4.4	4.2	4.1	4.0	3.9	
Lard (direct use)	7.7	7.2	6.4	6.3	6.4	5.5	5.4	5.6	5.1	4.7	4.3	3.8	3.4	
Margarine (fat content)	7.6	7.5	7.7	7.8	8.0	8.5	8.4	8.7	8.6	8.9	8.9	9.0	9.0	
Shortening	12.8	13.4	13.5	13.7	14.1	15.9	15.9	16.3	17.1	17.3	16.8	16.7	16.5	
Cooking and salad oils	9.2	11.0	11.1	11.9	12.5	12.7	12.7	13.5	14.4	15.5	15.7	17.2	18.1	
Other edible fats and oils	2.0	.7	2.1	2.3	1.6	2.4	2.5	2.5	2.4	2.7	2.3	2.4	2.4	
Total visible fats	45.1	45.7	46.3	47.6	47.8	49.7	49.4	51.2	51.9	53.3	52.1	53.2	53.4	
Invisible fats														
Dairy products, excluding butter	17.3	17.4	17.1	17.1	17.0	16.8	16.3	16.3	16.1	15.9	15.8	16.0	16.2	
Eggs	4.2	4.2	4.1	4.1	4.1	4.1	4.2	4.2	4.1	4.1	4.1	4.0	3.8	
Meat, poultry, game, and fish	38.7	39.2	40.8	41.5	39.1	39.7	42.2	43.3	43.1	44.0	46.2	44.8	42.8	
Dry beans, peas, nuts, soya flour and cocoa	5.7	5.2	5.8	5.7	5.9	5.8	6.0	6.2	5.9	6.0	6.1	6.3	6.2	
All fruits and vegetables	1.1	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.1	1.1	1.0	1.1	1.1	
Grain products	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	
Total invisible fats	68.8	68.8	70.6	71.1	68.9	69.1	71.4	72.7	72.0	72.8	74.9	73.9	71.8	
Total visible and invisible fats and oils	113.9	114.5	116.9	118.7	116.7	118.8	120.8	123.9	123.9	126.2	127.1	127.2	125.2	
	Percentage distribution													
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973 1/	1974
	--Percent--													
Visible fats 2/														
Butter (fat content)	5.2	5.2	4.7	4.6	4.5	3.9	3.6	3.7	3.6	3.3	3.2	3.1	3.1	
Lard (direct use)	6.8	6.3	5.5	5.3	5.5	4.6	4.5	4.5	4.1	3.7	3.4	3.0	2.7	
Margarine (fat content)	6.7	6.6	6.6	6.6	6.8	7.2	7.0	7.0	6.9	7.1	7.0	7.1	7.2	
Shortening	11.2	11.7	11.5	11.5	12.1	13.4	13.2	13.2	13.8	13.7	13.2	13.1	13.2	
Cooking and salad oils	8.1	9.6	9.5	10.0	10.7	10.7	10.5	10.9	11.6	12.3	12.4	13.5	14.5	
Other edible fats and oils	1.8	.6	1.8	1.9	1.4	2.0	2.1	2.0	1.9	2.1	1.8	1.9	1.9	
Total visible fats	39.6	39.9	39.6	40.1	41.0	41.8	40.9	41.3	41.9	42.2	41.1	41.9	42.7	
Invisible fats														
Dairy products, excluding butter	15.2	15.2	14.6	14.4	14.6	14.1	13.5	13.2	13.0	12.6	12.4	12.6	12.9	
Eggs	3.7	3.7	3.5	3.5	3.5	3.5	3.5	3.4	3.3	3.2	3.2	3.1	3.0	
Meat, poultry, game, and fish	34.0	34.2	34.9	35.0	33.5	33.4	34.9	34.9	34.8	34.9	36.3	35.2	34.2	
Dry beans, peas, nuts, soya flour and cocoa	5.0	4.5	5.0	4.8	5.1	4.9	5.0	5.0	4.8	4.8	4.8	5.0	5.0	
All fruits and vegetables	1.0	.9	.9	.8	.9	.9	.8	.8	.9	.9	.8	.9	.9	
Grain products	1.6	1.5	1.5	1.4	1.5	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.4	
Total invisible fats	60.4	60.1	60.4	59.9	59.0	58.2	59.1	58.7	58.1	57.8	58.9	58.1	57.3	
Total visible and invisible fats and oils	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

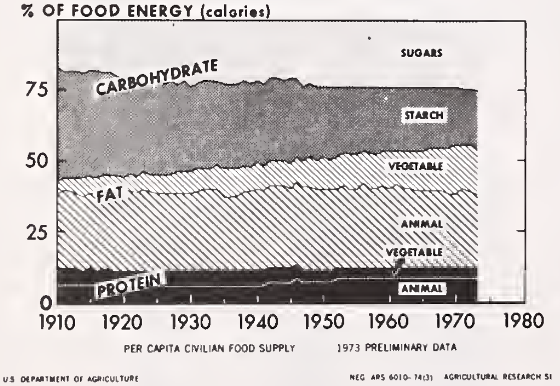
1/Preliminary. 2/Visible fats are those identifiable as such, at the first stage in marketing channels. Items other than visible fats and dairy products based on data of the Consumer and Food Economics Institute, ARS.

carbohydrate—during the past decade.[2] Protein and nutrient fat levels in our diets are near record highs. A continued increase in consumption of beef and salad and cooking oils in the 1970's mainly accounts for the higher levels of fat. Larger beef consumption accounts for more protein. Prior to the mid-1960's, the levels of these nutrients had held fairly stable for over a decade. The upturn in carbohydrate is slight, but signals a rise in use of sugars and sirup together with a leveling out in the downtrend in consumption of grain products, potatoes, and sweetpotatoes.



More food energy is now available in the Nation's food supply. Food energy in 1973 totaled an estimated 3,290 calories per capita per day—protein 100 grams, fat 156 grams, and carbohydrate 382 grams (table 8). Total food energy last year was 105% of the early 1960's level; protein was 106%, fat 110%, and carbohydrate 102%. Carbohydrate accounts for 46% of total food energy, fat for 42%, and protein 12%.

DISTRIBUTION OF ENERGY-YIELDING NUTRIENTS

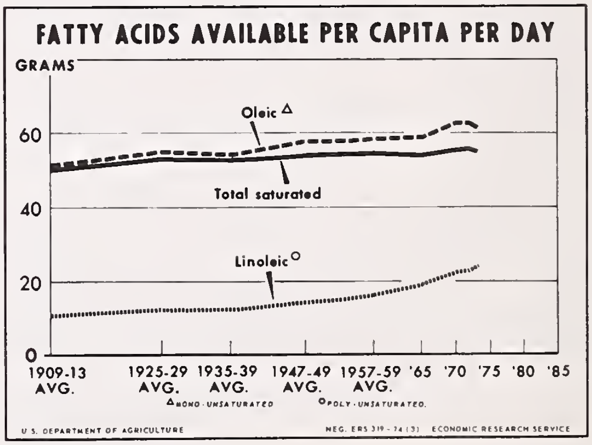


Fat is the most concentrated source of food energy. It supplies 9 calories per gram; protein and carbohydrate supply 4 calories per gram.

The large increase of nutrient fat in the U.S. food supply is mainly in the use of more vegetable oils. The per capita amount provided by animal fats has declined because sharp drops in butter and lard use were only partly offset by the increases in fat associated with a greater consumption of meats. Despite the decrease in consumption of animal fats, the proportion of total calories provided by such fats remains about one-fourth. Although calories from vegetable fats have increased, animal products still account for the largest share of the calories provided by fat.

Shifts in Fatty Acid Content of Food Supply

Changes in sources and increased amounts of fat in the U.S. diet have modified the fatty acid content of our food supply. Fats are classified as saturated or unsaturated depending on the kind of fatty acids present. The amount of total saturated fatty acids available per capita per day in 1973 was one-tenth higher than in 1909-13. However, they accounted for a smaller proportion of the total fat than at the beginning of the century—35% compared with 40%.[3]



Greater increases have taken place for oleic acid, a mono-unsaturated fatty acid, and for linoleic acid, a poly-unsaturated fatty acid. The amount of oleic acid in 1973 was one-fifth higher than in 1909-13. It continues to account for about 40% of the total fat. The amount of linoleic acid has more than doubled. Also, it now accounts for 16% of the total fat compared with 8% in 1909-13. The large increase in linoleic acid

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[2] "Nutrient Review" by Berta Friend, Consumer and Food Economics Institute, ARS, *National Food Situation*, NFS-142, November 1972.

[3] "Nutritional Review" by Berta Friend, Consumer and Food Economics Institute, ARS, *National Food Situation*, November 1970.

Table 8.--Food nutrients: Quantities available for consumption per capita per day, United States, 1950-73 1/

Calendar year	Food energy	Protein	Fat	Carbo-hydrate	Calcium	Phos-phorus	Iron 2/	Vitamin A value 3/	Thiamin 2/	Ribo-flavin 2/	Niacin 2/	Ascorbic acid 4/
	Calories	Grams	Grams	Grams	Grams	Grams	Milli-grams	Inter-national units	Milligrams	Milligrams	Milligrams	Milligrams
1950	3,260	94	145	402	0.99	1.53	16.5	8,400	1.90	2.29	20.2	105
1951	3,160	93	139	391	.98	1.51	16.1	8,000	1.90	2.27	19.9	107
1952	3,190	94	143	389	1.00	1.53	16.2	8,000	1.90	2.31	20.1	105
1953	3,170	95	142	386	.98	1.52	16.3	8,100	1.85	2.30	20.5	106
1954	3,150	94	142	380	.98	1.51	16.0	8,000	1.81	2.28	20.1	105
1955	3,180	95	146	378	1.00	1.53	16.2	8,200	1.87	2.31	20.3	106
1956	3,180	96	146	378	.99	1.54	16.4	8,200	1.87	2.32	20.7	105
1957	3,110	95	141	372	.98	1.52	16.1	8,100	1.83	2.29	20.5	107
1958	3,120	94	142	375	.97	1.50	16.1	8,000	1.82	2.27	20.5	102
1959	3,170	95	147	376	.98	1.52	16.2	8,100	1.88	2.29	20.8	106
1960	3,140	95	143	375	.97	1.51	16.3	8,000	1.85	2.28	20.8	108
1961	3,120	95	142	374	.96	1.50	16.4	7,800	1.84	2.26	20.9	107
1962	3,120	94	142	373	.96	1.49	16.5	7,800	1.86	2.27	21.1	107
1963	3,140	96	145	371	.96	1.50	16.6	7,800	1.87	2.28	21.5	101
1964	3,180	97	147	374	.96	1.51	16.8	7,700	1.87	2.29	21.7	100
1965	3,140	96	145	371	.95	1.50	16.6	7,700	1.81	2.27	21.5	100
1966	3,170	97	147	371	.95	1.50	16.5	7,800	1.80	2.29	21.6	102
1967	3,210	98	150	373	.94	1.52	17.2	7,900	1.91	2.33	22.4	108
1968	3,260	99	154	378	.95	1.53	17.4	8,100	1.91	2.35	22.7	109
1969	3,280	100	154	381	.94	1.53	17.6	8,100	1.93	2.35	22.8	111
1970	3,300	100	157	380	.93	1.52	17.8	8,200	1.93	2.35	23.1	114
1971	3,320	101	158	380	.94	1.53	17.9	8,200	1.97	2.37	23.3	115
1972	3,320	101	158	381	.94	1.53	18.0	8,100	1.93	2.35	23.3	115
1973 5/	3,290	100	156	382	.95	1.53	17.7	8,100	1.90	2.35	23.0	117
1974												

1/Quantities of nutrients computed by Agricultural Research Service, Consumer and Food Economics Institute, on the basis of estimates of per capita food consumption (retail weight), including estimates of produce of home gardens, prepared by the Economic Research Service. No deduction has been made in nutrient estimates for loss or waste of food in the home, use for pet food, or for destruction or loss of nutrients during the preparation of food. Civilian only.

2/Includes estimates of quantities added to flour and cereal products.

3/Includes estimates of quantities added primarily to margarine and to milk of all types and milk extenders.

4/Includes estimates of quantities added primarily to fruit juices and drinks, flavored beverages and dessert powders, milk extenders and cereals.

5/Preliminary.

SOURCE: Consumer and Food Economics Institute, ARS.

reflects the marked increase in use of salad and cooking oils.

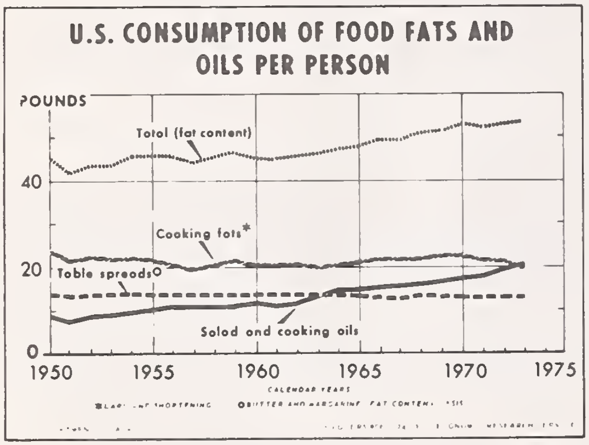
Estimates for total saturated fatty acids, oleic and linoleic acids, are given below.

The remainder of this paper will be concerned only with the trends in the consumption of visible (separated) food fats, 1950-73.

Food Fat Use Per Person Rising

The U.S. market for food fats and oils has expanded sharply during the past 2 decades. And dramatic changes have occurred in the structure of the food fat economy. There has been a distinct trend away from solid fats to liquid oils and from animal fats to vegetable oils. Edible vegetable oils have benefited most, garnering an ever-larger share of the growing market for fats and oils.

Consumption of food fats and oils has increased over the past 20 years—from an annual average of around 44 pounds per person (fat content basis) to about 53½ pounds. The gain has occurred largely since the mid-1960's (table 9).



Substitution has continually taken place not only among the 3 major food fat product groups—table spreads (butter and margarine), cooking fats (lard and shortening), and salad and cooking oils—but also among products within each group. Increased use of salad and cooking oils, shortening and margarine has more than offset declines in butter and lard.

Greater consumption of food fats partly reflects the changing eating habits of Americans—in time, place, and frequency of eating. Convenience and snack foods have risen sharply in popularity. This is related to the rising proportion of young people in the population, with more money to spend and more time. Similar growth has occurred in the fast-food enterprise, including hamburger and french fry franchises, and the chicken and fish carryouts. The recent slowdown in economic activity with increased unemployment apparently has not affected the demand for food fats and oils.

Soybean oil has emerged as the leading vegetable oil in the U.S. food fat economy—now accounting for well over half of all fats and oils going into food products. Soybean oil's growth has more than offset the decline in cottonseed oil, once the major edible oil produced and consumed in this country. Imported oils have also been an important source of supply. Before World War II the United States was a net importer of fats and oils.[4]

Economists usually analyze food fat consumption patterns from 2 aspects—the contribution of each fat or oil to the total fat consumed as such in the United States and also the amount of each that goes into the

Fatty acids available per capita per day

Year	Fatty acids			Total nutrient fat	Share of total fat from fatty acids		
	Total saturated	Unsaturated[1]			Total saturated	Oleic acid	Linoleic acid
		Oleic acid	Linoleic acid				
	Grams	*Grams*	*Grams*	*Grams*	*Percent*	*Percent*	*Percent*
1909-13	50.3	51.5	10.7	125.2	40.2	41.1	8.5
1925-29	53.3	55.2	12.5	134.6	39.6	41.0	9.3
1935-39	52.9	54.5	12.7	133.0	39.8	41.0	9.5
1947-49	54.4	58.0	14.8	141.1	38.6	41.1	10.5
1957-59	54.7	58.2	16.6	143.2	38.2	40.6	11.6
1965	53.9	58.8	19.1	144.8	37.2	40.6	13.2
1970	55.9	63.1	23.3	156.8	35.7	40.2	14.9
1972	56.4	63.0	23.8	158.0	35.7	39.9	15.1
1973[2]	55.2	61.7	24.1	155.6	35.5	39.7	15.5

[1] Major unsaturated fatty acids. Oleic is mono-unsaturated and linoleic is poly-unsaturated. [2] Preliminary.

Source: ARS, Consumer and Food Economics Institute.

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[4] See "World Oil and Protein Meal Situation" by George W. Kromer, Chapter 18, *Soybeans; Improvement, Production, and Uses*, published by the American Society of Agronomy, 1973.

Table 9.--Food fats and oils: Per capita consumption, by type of product, 1950-73 1/

Calendar year	Table spreads (product weight)			Cooking fats			Other edible fats and oils (mainly cooking and salad oils)						Total			
								Oil used in						Fat content		
	Butter	Margarine	Total	Lard (direct use) 2/	Short-ening	Total	Mayonnaise and salad dressing	Potato chips 3/	Frozen french fries 3/	Mello-rine 3/	Other 4/	Total	Product weight 5/	Animal fats	Vegetable oils	Total
								--Pounds--								
1950	10.7	6.1	16.8	12.6	11.0	23.6	2.6	6/	6/	6/	6.0	8.6	49.1	21.9	24.0	45.9
1951	9.6	6.6	16.2	12.3	9.0	21.3	2.6	6/	6/	6/	5.1	7.7	45.2	22.2	19.9	42.1
1952	8.6	7.9	16.5	11.8	10.2	22.0	2.7	6/	6/	.03	6.0	8.7	47.3	21.3	22.8	44.1
1953	8.5	8.1	16.6	11.4	10.2	21.7	2.7	6/	6/	.06	6.3	9.1	47.2	20.9	23.2	44.1
1954	8.9	8.5	17.4	10.2	11.8	22.0	2.6	6/	6/	.07	6.8	9.5	48.8	19.7	25.8	45.5
1955	9.0	8.2	17.2	10.1	11.5	21.6	2.9	6/	6/	.07	7.5	10.5	49.2	20.9	25.0	45.9
1956	8.7	8.2	16.9	9.8	10.9	20.7	3.0	1.0	.08	.07	6.8	10.9	48.5	21.4	23.8	45.2
1957	8.4	8.6	17.0	9.4	10.4	19.8	3.2	1.2	.08	.07	6.2	10.8	47.6	20.2	24.2	44.4
1958	8.3	9.0	17.3	9.6	11.3	20.9	3.3	1.1	.14	.08	5.9	10.5	48.7	20.1	25.2	45.3
1959	7.9	9.2	17.1	8.8	12.6	21.4	3.5	1.3	.16	.09	6.0	11.1	49.6	20.0	26.2	46.2
1960	7.5	9.4	16.9	7.6	12.6	20.2	3.5	1.3	.24	.09	6.5	11.5	48.5	18.5	26.7	45.3
1961	7.4	9.4	16.8	7.7	12.8	20.5	3.5	1.4	.28	.10	5.9	11.2	48.4	19.4	25.7	45.1
1962	7.3	9.3	16.6	7.2	13.4	20.5	3.5	1.5	.28	.10	6.3	11.7	49.0	18.7	27.0	45.7
1963	6.9	9.6	16.5	6.4	13.5	19.9	3.9	1.6	.34	.10	7.2	13.2	49.5	18.2	28.1	46.3
1964	6.9	9.7	16.6	6.3	13.7	20.0	3.9	1.7	.34	.10	8.4	14.2	50.8	17.3	30.3	47.6
1965	6.4	9.9	16.3	6.4	14.1	20.5	4.1	1.8	.52	.10	7.7	14.1	50.9	17.2	30.6	47.8
1966	5.7	10.5	16.2	5.5	15.9	21.4	4.3	1.9	.54	.10	8.3	15.1	52.9	15.9	33.8	49.7
1967	5.5	10.5	16.0	5.4	15.9	21.3	4.4	1.9	.53	.10	8.1	15.2	52.5	16.2	33.2	49.4
1968	5.7	10.8	16.5	5.6	16.3	21.9	4.6	1.9	.55	.10	8.9	16.0	54.4	16.7	34.5	51.2
1969	5.4	10.8	16.2	5.1	17.1	22.2	4.8	2.0	.61	.10	9.2	16.8	55.1	14.9	37.0	51.9
1970	5.3	11.0	16.3	4.7	17.3	22.0	5.0	2.1	.65	.10	10.3	18.2	56.5	14.1	39.2	53.3
1971	5.1	11.1	16.2	4.3	16.8	21.1	5.3	2.0	.87	.09	9.7	18.0	55.4	13.5	38.6	52.1
1972	5.0	11.3	16.3	3.8	16.7	20.5	5.5	1.9	.91	.08	11.2	19.6	56.4	13.1	40.1	53.2
1973 7/	4.8	11.3	16.1	3.4	16.5	19.9	5.7	2.2	.96	.07	11.5	20.5	56.6	11.8	41.6	53.4
1974																

1/Civilian consumption only.

2/Excludes use in margarine, shortening, and nonfood products.

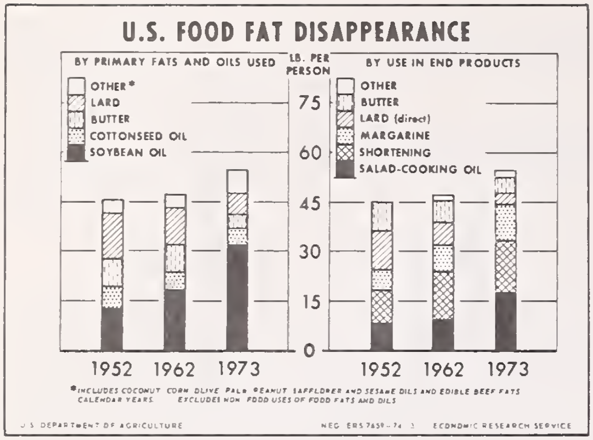
3/Estimated from data on production of item.

4/Computed as a residual. Includes retail trade and use of oil in commercial frying, roasting, bakery and other products including confectionery fats, toppings, milk fillings, and other specialty fats.

5/Table spreads and cooking fats plus oil content of other edible fats and oils.

6/Not available.

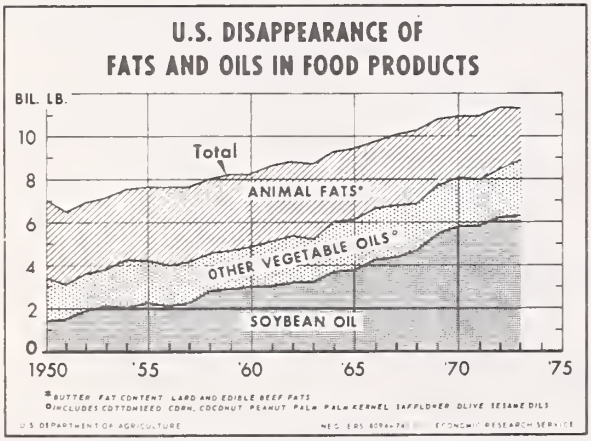
7/Preliminary.



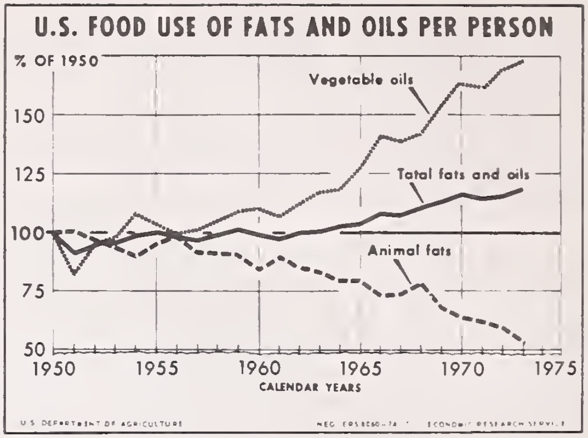
various food fat products. I will follow this technique, first considering the trends for the primary fats and oils relative to aggregate consumption patterns.

Edible Oil Use Rises; Animal Fats Decline

Domestic disappearance of primary fats and oils in food products rose from around 6½ billion pounds in the early 1950's to roughly 11½ billion last year—an increase of some 75% (table 10). Distribution patterns changed significantly among the various types of fats and oils utilized.



Twenty years ago, the food fat market was split approximately equally between animal fats (lard, butter, and edible beef fats) and edible vegetable oils. In 1973, however, edible vegetable oils accounted for about four-fifths and animal fats only one-fifth. On a per capita basis, edible vegetable oil consumption jumped during the past 2 decades—from 22 pounds to over 42 pounds. Meanwhile, animal fat use fell from 22 to 11 pounds.



Edible vegetable oils became dominant mainly because of (1) sharp growth in output of soybean oil at competitive price levels; (2) increased hydrogenation processing which made possible the manufacture of shortenings entirely from vegetable oils; (3) consumer shifts from butter to lower-priced vegetable oil margarines; (4) trends of diet-and-cholesterol-conscious consumers toward liquid (unsaturated) oils and away from solid (saturated) fats. The edible oil industry has met the challenge for unsaturated fats by producing more vegetable oil shortening, salad and cooking oils, "soft" margarines, and by using more edible oil in commercial food preparations.

Soybean Oil Dominates Market

Soybean oil used in food fat products domestically expanded from around 1.5 billion pounds in the early 1950's to 6.3 billion in 1973. Two decades ago, soybean oil and cottonseed oil each accounted for a fifth of all food fats and oils utilized. Lard was in first place with a third of the market. Then soybean oil usage moved up swiftly, and in 1973 accounted for 56% of a 75% larger food fat market.

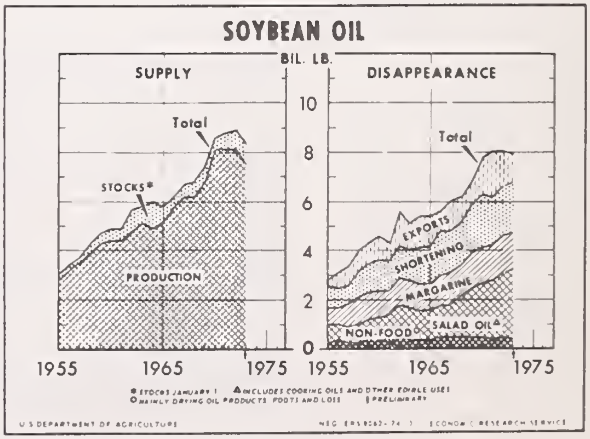


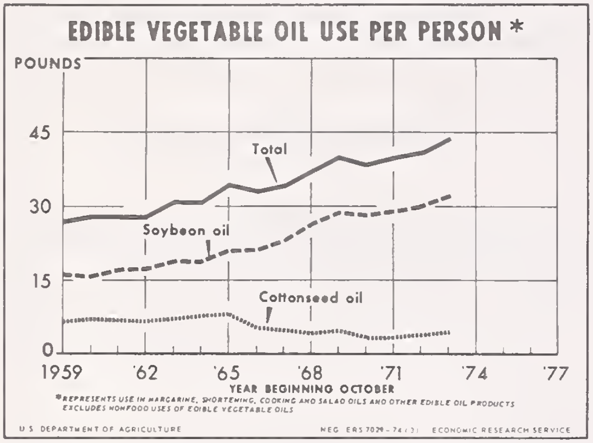
Table 10.--U.S. domestic disappearance of fats and oils in food products, by type of fat or oil, total and per capita, 1950-73 1/

Calendar year	Vegetable oil											Animal fat				Fats and oils used in food products for domestic consumption		U.S. population 4/
	Soybean	Cottonseed	Corn	Coconut	Peanut	Palm	Palm kernel	Safflower	Olive	Sesame	Total vegetable oils	Butter 2/	Lard	Beef fats	Total animal fats	Total 3/	Per capita	
								Total Million pounds									Pounds	Million
1950	1,446	1,445	223	129	103	---	26	---	79	4	3,455	1,327	2,050	156	3,533	6,988	45.9	152.3
1951	1,536	1,043	211	142	114	---	11	---	40	5/	3,097	1,205	2,059	131	3,395	6,492	41.9	154.9
1952	1,911	1,218	201	191	84	1	11	---	46	5/	3,663	1,090	2,054	144	3,288	6,951	44.1	157.6
1953	2,128	1,148	235	183	47	1	20	---	45	5/	3,807	1,104	2,007	187	3,298	7,105	44.4	160.2
1954	2,002	1,725	232	204	57	16	32	---	61	5/	4,329	1,187	1,776	230	3,193	7,522	46.1	163.0
1955	2,309	1,341	233	194	48	---	36	---	52	1	4,214	1,237	1,986	239	3,462	7,676	46.3	165.9
1956	2,155	1,252	254	226	66	---	42	---	45	5/	4,040	1,231	2,113	276	3,620	7,660	45.4	168.9
1957	2,296	1,223	272	233	66	---	47	---	49	1	4,186	1,176	1,990	302	3,468	7,654	44.5	172.0
1958	2,824	1,028	269	253	62	---	47	---	53	1	4,537	1,182	1,974	308	3,464	8,001	45.7	174.9
1959	2,912	1,064	309	180	81	3	49	---	54	5/	4,652	1,145	2,065	315	3,525	8,177	46.0	177.8
1960	3,011	1,225	310	172	62	1	53	---	51	1	4,886	1,113	1,889	328	3,330	8,216	45.5	180.7
1961	3,041	1,276	326	206	94	30	59	---	59	1	5,092	1,112	1,998	424	3,534	8,626	47.0	183.7
1962	3,275	1,239	343	267	62	29	70	40	58	1	5,384	1,131	1,959	407	3,497	8,881	47.6	186.5
1963	3,258	1,169	351	224	69	17	69	52	33	1	5,243	1,083	1,871	510	3,464	8,707	46.0	189.2
1964	3,739	1,348	412	254	58	11	67	38	67	1	5,995	1,097	1,704	538	3,339	9,334	48.7	191.8
1965	3,750	1,410	427	272	70	13	80	51	44	1	6,118	1,040	1,772	529	3,334	9,459	48.6	194.2
1966	4,296	1,217	396	346	144	52	65	84	49	1	6,650	911	1,645	533	3,089	9,739	49.6	196.5
1967	4,365	1,076	403	361	173	62	108	158	56	2	6,764	1,881	1,757	545	3,183	9,946	50.1	198.6
1968	4,734	981	404	368	200	77	98	69	63	1	6,995	957	1,861	549	3,367	10,362	51.7	200.6
1969	5,486	958	391	401	148	128	93	123	58	2	7,788	912	1,574	519	3,005	10,793	53.3	202.6
1970	5,843	974	414	343	153	113	78	80	62	2	8,062	888	1,456	533	2,877	10,939	53.4	204.8
1971	5,816	721	392	457	183	194	82	115	62	2	8,024	860	1,559	530	2,949	10,973	53.0	207.0
1972	6,206	703	463	411	179	331	68	111	67	2	8,541	843	1,355	623	2,821	11,362	54.4	208.8
1973 7/	6,303	902	463	448	147	391	106	100	60	2	8,922	814	1,118	452	2,384	11,306	53.7	210.4
1974																		
																	Percent distribution	
								Per capita Pounds									Vegetable oils	Animal fats
1950	9.5	9.5	1.5	0.8	0.7	---	0.2	---	0.5	6/	22.7	8.7	13.5	1.0	23.2	45.9	49	51
1951	9.9	6.7	1.4	.9	.7	---	6/	---	.3	6/	20.0	7.8	13.3	.8	21.9	41.9	48	52
1952	12.1	7.7	1.3	1.2	.5	6/	.1	---	.3	6/	23.2	7.6	13.1	.8	20.9	44.1	53	47
1953	13.3	7.2	1.5	1.1	.3	6/	.1	---	.3	6/	23.8	6.9	12.5	1.2	20.6	44.4	54	46
1954	12.3	10.6	1.4	1.3	.3	0.1	.2	---	.4	6/	26.6	7.3	10.9	1.4	19.6	46.1	58	42
1955	13.9	8.1	1.4	1.2	.3	---	.2	---	.3	6/	25.4	7.5	12.0	1.4	20.9	46.3	55	45
1956	12.8	7.4	1.5	1.3	.4	---	.2	---	.3	6/	23.9	7.3	12.5	1.6	21.4	45.4	53	47
1957	13.3	7.1	1.6	1.4	.4	---	.3	---	.3	6/	24.3	6.8	11.6	1.8	20.2	44.5	55	45
1958	16.1	5.9	1.5	1.4	.4	---	.3	---	.3	6/	25.9	6.8	11.3	1.8	19.8	45.7	57	43
1959	16.4	6.0	1.7	1.0	.5	6/	.3	---	.3	6/	26.2	6.4	11.6	1.8	19.8	46.0	57	43
1960	16.7	6.8	1.7	1.0	.3	6/	.3	---	.3	6/	27.0	6.2	10.5	1.8	18.4	45.5	59	41
1961	16.6	6.9	1.8	1.1	.5	.2	.3	---	.3	6/	27.7	6.1	10.9	2.3	19.2	47.0	59	41
1962	17.6	6.6	1.8	1.4	.3	.2	.4	.2	.3	6/	28.8	6.1	10.5	2.2	18.7	47.6	61	39
1963	17.2	6.2	1.9	1.3	.3	.1	.4	.2	.2	6/	27.7	5.7	9.9	2.7	18.3	46.0	60	40
1964	19.5	7.0	2.1	1.3	.3	.1	.3	.2	.3	6/	31.2	5.7	8.9	2.8	17.4	48.7	64	36
1965	19.3	7.2	2.2	1.4	.4	.1	.4	.3	.2	6/	31.4	5.3	9.1	2.7	17.1	48.6	65	35
1966	21.9	6.2	2.0	1.8	.7	.3	.3	.4	.2	6/	33.8	4.6	8.4	2.7	15.7	49.6	68	32
1967	22.0	5.4	2.0	1.8	.9	.3	.5	.8	.3	6/	34.0	4.4	8.8	2.7	16.0	50.1	68	32
1968	23.6	4.9	2.0	1.8	1.0	.4	.5	.3	.3	6/	34.8	4.8	9.2	2.7	16.7	51.7	68	32
1969	27.1	4.7	1.9	2.0	.7	.6	.5	.6	.3	6/	38.3	4.5	7.7	2.6	14.8	53.3	72	28
1970	28.5	4.7	2.0	1.7	.7	.5	.4	.4	.3	6/	39.2	4.3	7.1	2.6	14.0	53.4	74	26
1971	28.1	3.5	1.9	2.2	.9	.9	.4	.6	.3	6/	38.8	4.1	7.6	2.6	14.3	53.0	73	27
1972	29.7	3.4	2.2	2.0	.9	1.6	.3	.5	.3	6/	40.9	4.0	6.5	3.0	13.5	54.4	75	25
1973 7/	30.0	4.3	2.2	2.1	.7	1.8	.5	.5	.3	6/	42.4	3.9	5.3	2.1	11.3	53.7	79	21
1974																		

1/Includes disappearance into products for both civilian and military consumption. Data not adjusted for changes in finished product stocks and excludes exports. 2/Fat content of butter which averages 80.5% of total weight. 3/Includes butter on fat content basis. 4/Total population (50 States) including armed forces overseas as of July 1 each year. 5/Less than 500,000 pounds. 6/Less than 0.1 pounds. 7/Preliminary.

Soybean oil has prospered, since producers have responded directly to expanding demand for soybean oil and meal. In contrast, cottonseed oil and lard are unresponsive to demand and price changes since they are byproducts of the cotton and hog industries. Butter output is affected by the supply of milk and the use of milk in other dairy products.

Soybean oil's dominance is even more striking when edible vegetable oils are analyzed as a group. During 1950-73, soybean oil's share gained from about 42% to over 70% of the edible oils. With the declining market for cotton, cottonseed oil fell from 42% to 10%. Use of corn, coconut, peanut, palm, and safflower oils trended upward but their shares remained small.


EDIBLE VEGETABLE OIL USE PER PERSON *

*REPRESENTS USE IN MARGARINE, SHORTENING, COOKING AND SALAD OILS AND OTHER EDIBLE OIL PRODUCTS EXCLUDES NONFOOD USES OF EDIBLE VEGETABLE OILS

U.S. DEPARTMENT OF AGRICULTURE NEG. ERS 7029-74 (3) ECONOMIC RESEARCH SERVICE

In 1973, soybean oil accounted for 79% of the fats and oils going into the manufacture of margarine, 73% of those utilized in salad and cooking oils, and 58% of the fats and oils used in shortenings (table 11).

Consumption Trends of Products

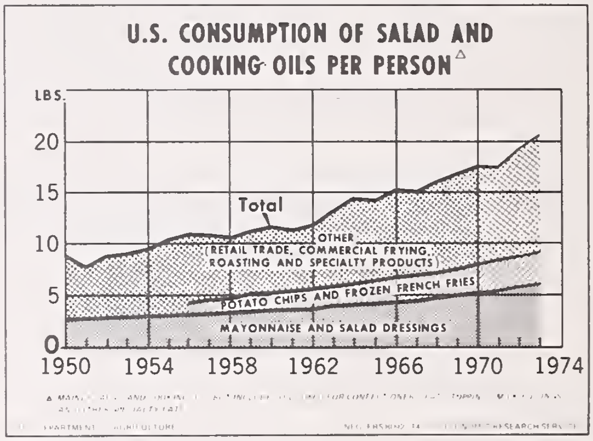
Now we will focus on the changing consumption pattern of food fat products. Today's consumers can choose from a wide variety of products based on edible fats and oils. Butter, margarine, lard, shortening, salad and cooking oils, mayonnaise, and a host of salad dressings—French dressing, Italian, and other specialty salad dressings—are some products that are either based wholly on fats and oils or contain them as a principal ingredient. Many of these products are also sold commercially to bakeries, food processors, institutions, and restaurants.

During 1950-73, the most significant development was the continuing trend toward use of products prepared from vegetable oils and away from those prepared from animal fats. Butterfat consumed as butter and the direct use of lard decline steadily. Salad and cooking oils showed sharp gains. And so did margarines and shortenings, produced principally from vegetable oils.

The trend toward the more extensive use of edible vegetable oils, coupled with manufacturers' efforts to increase output of unsaturated products, undoubtedly resulted in an increase in the ratio of unsaturated to saturated fatty acids in the U.S. diet.

Major Shift to Salad and Cooking Oils

Salad and cooking oils have led the increase in U.S. consumption of food fat products, the volume tripling from around 1.2 billion pounds per year in the early 1950's to 3.8 billion pounds in 1973 (table 12). The growth pattern was fairly steady until the mid-1960's, then it rose precipitously. On a per capita basis, usage during 1950-73 rose from around 7 pounds to a record 18 pounds.


U.S. CONSUMPTION OF SALAD AND COOKING OILS PER PERSON △

This sharp uptrend reflects increased use of liquid edible oils as such by the retail trade, along with the growing use of vegetable oils in commercial frying, roasting, and production of prepared foods—such as mayonnaise, salad dressings, potato chips, frozen french fries, fried snack foods, mellorine, bakery food mixes, confectionery fats, toppings, milk fillings, and other specialty fats. In 1973, salad and cooking oils comprised one-third of the total food fats and oils consumed in the United States compared with less than one-fifth some 20 years earlier.

Salad and cooking oils are made from vegetable oils that are usually refined, bleached, deodorized, and sometimes lightly hydrogenated. Soybean oil is the leading oil sold in this form, and its lead is increasing. It accounted for a fourth of all oils used in salad and cooking oils in 1950, but about three-fourths in 1973 (tables 13). Cottonseed oil usage slipped from around 40% to 15%. Corn, peanut, safflower and olive oils are also used but their share of the total market showed little change.

See table 14 for the major fatty acid composition of salad and cooking oils and other commonly used sources of fat.

Table 11.--Fats and oils used in manufacture of food products, by product, and fat or oil, 1953-73

Calendar year	Margarine									Shortening									
	Soybean oil	Cottonseed oil	Corn oil	Safflower oil	All other edible oils 1/	Total edible oils	Lard and beef fats	Vegetable stearine	Total fats and oils	Soybean oil	Cottonseed oil	Palm oil	Coconut oil	All other edible oils 2/	Total edible oils	Lard and beef fats	Vegetable stearine and glycerides	Total fats and oils
									-- Million pounds --									
1953	726	275	1	---	14	1,016	21	12	1,049	903	376	---	2	6	1,288	273	117	1,681
1954	665	397	3/	---	10	1,072	17	17	1,106	918	640	---	15	26	1,599	231	138	1,969
1955	746	278	3/	---	13	1,037	22	16	1,075	930	439	---	4	24	1,397	452	139	1,988
1956	752	283	1	---	12	1,048	38	24	1,111	782	323	---	6	16	1,127	600	128	1,855
1957	874	237	3/	---	11	1,122	34	24	1,182	796	272	---	8	13	1,089	602	132	1,824
1958	1,070	145	1	---	10	1,226	24	19	1,269	1,055	239	---	12	10	1,316	570	125	2,011
1959	1,094	124	20	---	10	1,248	44	4/	1,291	1,143	320	---	20	11	1,494	750	4/	2,244
1960	1,105	136	55	---	9	1,305	62		1,367	1,169	365	---	10	9	1,553	748		2,302
1961	1,062	139	89	---	17	1,307	78		1,386	1,160	356	11	26	28	1,581	878		2,459
1962	1,058	106	99	6	46	1,315	80		1,394	1,362	367	16	27	15	1,787	909		2,696
1963	1,049	104	136	22	44	1,365	95		1,451	1,228	330	14	19	14	1,605	1,007		2,611
1964	1,139	101	150	12	21	1,423	77		1,500	1,388	378	11	18	21	1,816	876		2,693
1965	1,112	114	161	10	23	1,420	114		1,535	1,471	403	13	20	17	1,924	844		2,768
1966	1,294	106	157	46	19	1,622	87		1,710	1,734	370	38	38	30	2,210	982		3,192
1967	1,249	78	176	42	24	1,569	135		1,703	1,741	273	61	40	46	2,161	1,082		3,243
1968	1,240	70	179	42	21	1,552	168		1,720	1,842	248	72	41	35	2,238	1,088		3,326
1969	1,333	76	172	43	21	1,645	98		1,744	2,101	248	110	46	42	2,547	958		3,505
1970	1,410	68	185	22	11	1,696	99		1,794	2,182	276	85	45	35	2,623	976		3,599
1971	1,385	63	186	19	9	1,662	168		1,831	2,047	168	175	56	30	2,476	1,037		3,513
1972	1,459	65	194	20	8	1,746	138		1,883	2,043	168	287	77	33	2,608	1,032		3,640
1973 5/	1,490	63	213	32	11	1,809	79		1,888	2,120	180	351	82	45	2,778	860		3,638
1974																			
1975																			

Calendar year	Salad and cooking oils 6/								Other edible products 7/									
	Soybean oil	Cottonseed oil	Corn oil	Peanut oil	Safflower oil	Olive	All other edible oils	Total edible oils	Soybean oil	Cottonseed oil	Corn oil	Coconut oil	Palm oil	Palm kernel oil	Peanut oil	Safflower oil	Other	Total other edible products
									-- Million pounds --									
1953									497	497	236	174	---	15	42	---	51	1,512
1954									419	687	231	257	---	28	43	---	61	1,726
1955									633	624	229	186	---	28	41	---	59	1,800
1956									621	647	252	213	---	34	57	---	45	1,869
1957									626	714	267	220	---	42	57	---	53	1,979
1958	8/	8/	8/	8/	8/	8/	8/	8/	699	644	265	237	---	47	53	---	53	1,998
1959	850	650	272	40	---	54	4	1,870	23	14	12	157	3	49	36	---	111	405
1960	887	752	247	28	---	51	1	1,966	27	18	6	158	1	53	28	---	69	360
1961	1,019	818	210	76	---	59	3	2,185	22	10	1	176	4	48	12	---	29	302
1962	1,437	817	210	46	6	58	17	2,591	21	8	11	195	9	22	11	---	6	283
1963	1,317	764	202	55	27	33	1	2,399	16	10	10	201	2	26	8	---	78	351
1964	1,638	906	241	50	20	67	---	2,922	22	12	13	229	---	58	4	---	32	370
1965	1,564	915	239	53	9	44	---	2,824	35	24	11	234	13	67	10	---	4	398
1966	1,860	746	217	115	12	49	5	3,004	47	26	5	284	14	68	8	1	12	465
1967	1,912	625	231	133	42	54	3	3,000	52	25	3	298	1	78	8	10	8	483
1968	2,036	541	242	156	22	63	3	3,063	43	44	8	272	4	90	19	5	5	490
1969	2,244	513	248	124	19	58	2	3,207	35	47	8	273	18	70	9	---	9	470
1970	2,471	527	246	139	12	62	6	3,464	38	52	6	287	14	67	8	4	4	481
1971	2,658	442	193	160	11	62	8	3,534	36	44	7	293	18	65	9	3	5	480
1972	3,041	435	259	148	9	67	24	3,984	26	34	10	306	42	58	9	2	15	502
1973 5/	2,907	586	286	127	14	60	24	4,004	20	25	3	352	21	71	9	1	3	505
1974																		
1975																		

1/ Mainly peanut and coconut oils.
2/ Mainly peanut, corn and palm kernel oils.
3/ Less than 500,000 pounds.
4/ Not reported separately by Census beginning 1959.
5/ Preliminary.
6/ Fully processed liquid vegetable oils. Includes uses in mayonnaise, salad dressings, potato products, bakery products, and in fish canning, etc. Not reported separately prior to 1959; 1953-58 included in "other edible" products. Includes salad and cooking oils processed for export.
7/ Mainly salad and cooking oils prior to 1959. Beginning with 1959 includes all food fats and oils used other than butter, lard, margarine, shortening, and salad and cooking oils.
8/ Not reported separately prior to 1959. Data for 1953-58 included in "other edible" products.

Table 12.--Salad and cooking oils: Supply, disposition, oils utilized and retail price, 1959-73 1/

Calendar year	Supply				Disposition			Oils used in manufacture for domestic use						Retail price per pound
	Production	Imports 2/	Stocks Jan. 1	Total	Exports 3/	Domestic use	Total disposition	Soybean 4/	Cottonseed 4/	Corn	Peanut	Safflower	Total 4/	
	--Million pounds--													Cents
1959	1,808	54	56	1,918	353	1,512	1,865	583	606	272	40	---	1,501	---
1960	1,915	51	53	2,019	312	1,647	1,959	648	706	247	28	---	1,629	---
1961	2,124	59	60	2,243	352	1,690	2,042	759	748	210	76	---	1,793	---
1962	2,532	58	200	2,790	474	2,043	2,517	1,084	716	210	46	6	2,062	---
1963	2,359	33	273	2,665	440	2,080	2,520	975	688	202	55	27	1,947	---
1964	2,846	67	145	3,058	659	2,280	2,939	1,140	781	241	50	20	2,231	32.0
1965	2,773	44	119	2,936	422	2,428	2,851	1,226	830	239	53	9	2,357	34.9
1966	2,947	49	86	3,082	496	2,502	2,999	1,395	715	217	115	12	2,455	38.6
1967	2,922	56	83	3,061	463	2,518	2,981	1,476	598	231	133	42	2,480	38.0
1968	2,996	63	80	3,139	350	2,709	3,059	1,711	516	242	156	22	2,647	35.4
1969	3,144	58	79	3,281	324	2,886	3,210	1,962	471	248	124	19	2,825	34.7
1970	3,389	62	71	3,522	293	3,154	3,447	2,189	516	246	139	12	3,102	37.7
1971	3,500	62	76	3,638	320	3,241	3,561	2,347	442	193	160	11	3,154	42.2
1972	3,904	67	76	4,047	398	3,564	3,962	2,679	435	259	148	9	3,530	42.9
1973 5/	3,928	60	86	4,074	218	3,782	4,000	2,716	521	286	130	14	3,667	47.0
1974			74											

1/Data not available prior to 1959.

2/Olive oil only.

3/Refined and further processed cottonseed oil, soybean oil, and miscellaneous vegetable oils. Includes foreign donations.

4/Excludes exports of refined and further processed cottonseed oil and soybean oil.

5/Preliminary.

Table 13.--Salad and cooking oils: Production, fats and oils used in manufacture, and domestic consumption, 1959-73 1/

Calendar year	Salad and cooking oils 2/			Total oils used in salad and cooking oil manufacture 2/	Edible vegetable oils consumed in salad and cooking oil manufacture (% of total)							Cooking and salad oil domestic consumption (civilian)	
	Domestic production	Imports 3/	Total		Soybean	Cottonseed	Corn	Peanut	Safflower	Olive	All other	Total	Per capita
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Mil. lb.	Pounds
1959	1,808	54	1,862	1,870	45.5	34.8	14.5	2.1	---	2.9	0.2	1,486	8.5
1960	1,915	51	1,966	1,966	45.1	38.2	12.6	1.4	---	2.6	.1	1,630	9.2
1961	2,124	59	2,183	2,185	46.6	37.5	9.6	3.5	---	2.7	.1	1,661	9.2
1962	2,532	58	2,590	2,591	55.5	31.5	8.1	1.8	0.2	2.2	.7	2,021	11.0
1963	2,359	33	2,392	2,399	54.9	31.8	8.4	2.3	1.1	1.4	.1	2,066	11.1
1964	2,846	67	2,913	2,922	56.1	31.0	8.2	1.7	.7	2.3	---	2,249	11.9
1965	2,773	44	2,816	2,824	55.4	32.4	8.5	1.9	.3	1.5	---	2,398	12.5
1966	2,947	49	2,996	3,004	61.9	24.8	7.2	3.8	.4	1.7	.2	2,464	12.7
1967	2,922	54	2,976	3,000	63.7	20.8	7.7	4.5	1.4	1.8	.1	2,474	12.7
1968	2,996	63	3,059	3,063	66.5	17.7	7.9	5.1	.7	2.0	.1	2,665	13.5
1969	3,144	58	3,202	3,207	70.0	16.0	7.7	3.8	.6	1.8	.1	2,863	14.4
1970	3,389	62	3,451	3,464	71.3	15.2	7.1	4.0	.4	1.8	.2	3,125	15.5
1971	3,500	62	3,624	3,534	75.2	12.5	5.5	4.5	.3	1.8	.2	3,215	15.7
1972	3,904	67	3,971	3,984	76.3	10.9	6.5	3.7	.2	1.7	.7	3,547	17.2
1973 4/	3,928	60	3,988	4,004	72.6	14.6	7.1	3.2	.3	1.5	.7	3,771	18.1
1974													

1/Data not available prior to 1959.

2/Includes salad and cooking oils processed for export.

3/Olive oil.

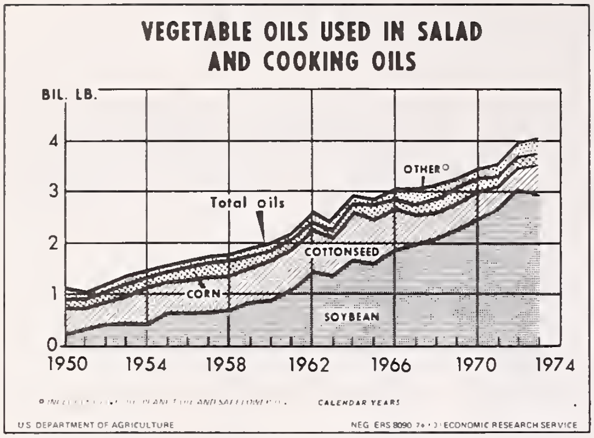
4/Preliminary.

Table 14.--Fat content and major fatty acid composition of selected foods (in decreasing order of linoleic acid content within each group of similar foods)

Food	Total fat	Fatty acids 1/		
		Saturated 2/	Unsaturated	
			Oleic	Linoleic
	Percent	Percent	Percent	Percent
Salad and cooking oils:				
Safflower	100	10	13	74
Sunflower	100	11	14	70
Corn	100	13	26	55
Cottonseed	100	23	17	54
Soybean 3/	100	14	25	50
Sesame	100	14	38	42
Soybean, specially processed	100	11	29	31
Peanut	100	18	47	29
Olive	100	11	76	7
Coconut	100	80	5	1
Vegetable fats-shortening	100	23	23	6-23
Table spreads:				
Margarine, first ingredient on label: 4/,5/				
Safflower oil (liquid)-tub	80	11	18	48
Corn oil (liquid)-tub	80	14	26	38
Soybean oil (liquid)-tub 6/	80	15	31	33
Corn oil (liquid)-stick	80	15	33	29
Soybean oil (liquid)-stick 6/	80	15	40	25
Cottonseed or soybean oil partially hydrogenated-tub 6/	80	16	52	13
Butter	81	46	27	2
Animal fats:				
Poultry	100	30	40	20
Beef, lamb, pork	100	45	44	2-6
Fish, raw: 6/				
Salmon	9	2	2	4
Tuna	5	2	1	2
Mackerel	13	5	3	4
Herring, Pacific	13	4	2	3
Nuts:				
Walnuts, English	64	4	10	40
Walnuts, black	60	4	21	28
Brazil	67	13	32	17
Peanuts or peanut butter	51	9	25	14
Pecan	65	4-6	33-48	9-24
Egg yolk	31	10	13	2
Avocado	16	3	7	2

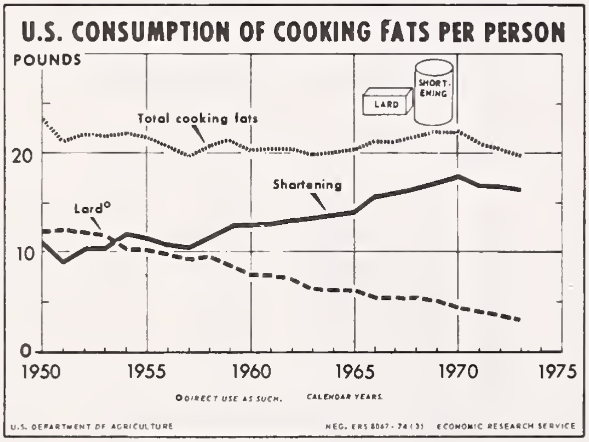
1/ Total is not expected to equal "total fat."
2/ Includes fatty acids with chains from 8 through 18 carbon atoms.
3/ Suitable as salad oil.
4/ Mean values of selected samples and may vary with brand name and date of manufacture.
5/ Includes small amounts of mono-unsaturated and di-unsaturated fatty acids that are not oleic or linoleic.
6/ Linoleic acid includes higher polyunsaturated fatty acids.

Source: "Fats in Food and Diet," USDA, Agricultural Research Service, Agriculture Information Bulletin No. 361, 1974.

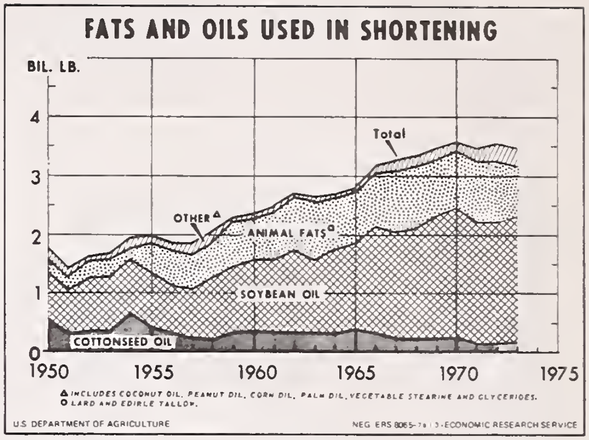


Cooking Fat Use Steady

During the past 2 decades, per capita consumption of cooking fats (direct use of lard plus shortening) held fairly stable, averaging around 20 to 22 pounds annually. However, the direct use of lard (in homes, in bakeries, and commercial and other institutions) trended downward—from 12 pounds in 1950 to 3½ pounds in 1973 (table 18). This was about offset by increased consumption of prepared shortenings—from around 10 to 17 pounds. Cooking fats represent about two-fifths of total domestic food fat usage.



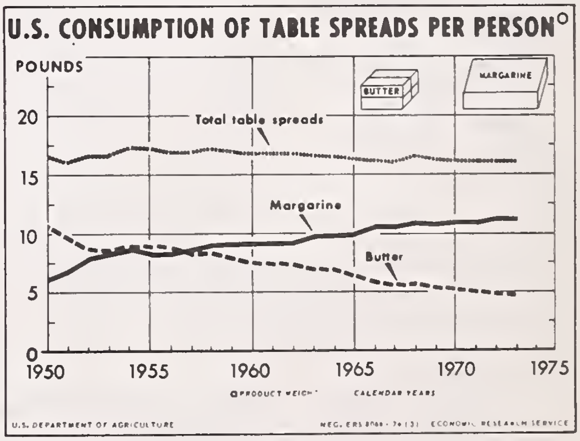
Changes in shortening manufacturing techniques, consumer preferences, and population shift from rural to urban areas have all affected the competitive nature of the cooking fats industry. Some of the lard formerly consumed directly is now being blended with other animal fats and mixtures of animal and vegetable fats in hydrogenated shortenings. In 1973, about three-fourths of the shortenings produced were all vegetable oil and one-fourth all animal fat or blends (tables 15 and 16).



Margarine Gains at Butter's Expense

U.S. consumers have been shifting from butter toward margarine as a table spread for many years. This is attributable to the substantial price difference between the products, improvements in the formulations and qualities of margarine, the repeal of anti-margarine laws, and the need to substitute margarine for butter during World War II. Wholesale butter prices usually have been at least double those for margarine. The dairy price-support program has kept the price of butter at a high level.

During the past 20 years, per capita consumption of table spreads remained relatively steady, averaging 16-17 pounds a year. (This rate represents a fat use of 13 to 14 pounds because the fat content of butter and margarine are roughly 80% of the product weight). These products now comprise about a fourth of total U.S. food fat consumption. Increased use of margarine over the years has about offset the decline in butter (table 17).



Margarine consumption rose steadily from 6 pounds (product weight) per person in 1950 to a new high of over 11 pounds in 1972 and 1973. Margarine

Table 15.--Shortening: Supply, disposition, and price, 1950-73

Calendar year	Supply						Disposition				Price per pound
	Production							Domestic disappearance			All vegetable hydrogenated 3 lb. tins Eastern U.S.
	100% vegetable oil	100% animal fat or blends	Total	Imports	Stocks, Jan. 1	Total supply	Exports and shipments	Military excluding relief	Civilian Total	Civilian Per capita	
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Pounds	Cents
1950	---	---	1,710	1/	82	1,792	13	20	1,656	11.0	27.2
1951	---	---	1,403	1/	104	1,507	13	28	1,365	9.0	33.1
1952	---	---	1,611	1/	101	1,713	10	47	1,562	10.2	26.7
1953	---	---	1,675	---	94	1,768	16	62	1,597	10.2	27.9
1954	---	---	1,961	---	94	2,055	17	45	1,870	11.8	28.3
1955	---	---	1,975	---	120	2,095	42	47	1,863	11.5	27.2
1956	---	---	1,842	---	143	1,985	12	54	1,797	10.9	29.4
1957	---	---	1,808	---	122	1,930	17	37	1,756	10.4	29.8
1958	---	---	2,006	---	120	2,126	33	30	1,935	11.3	27.9
1959	---	---	2,252	---	127	2,380	36	32	2,196	12.6	25.6
1960	---	---	2,313	---	115	2,428	31	39	2,238	12.6	24.8
1961	---	---	2,456	---	120	2,576	2/92	51	2,311	12.8	27.7
1962	---	---	2,689	---	123	2,812	2/139	39	2,469	13.4	25.0
1963	---	---	2,584	---	165	2,749	2/66	39	2,525	13.5	22.3
1964	3/	3/	2,664	---	119	2,783	21	43	2,598	13.7	22.5
1965	1,852	940	2,792	---	121	2,913	45	57	2,695	14.1	26.4
1966	2,113	1,068	3,181	---	117	3,298	41	59	3,079	15.9	27.1
1967	2,077	1,149	3,226	---	119	3,345	39	58	3,108	15.9	26.5
1968	2,139	1,173	3,312	---	139	3,451	44	53	3,211	16.3	25.5
1969	2,318	1,163	3,481	---	143	3,624	32	54	3,398	17.1	25.9
1970	2,411	1,177	3,588	---	139	3,727	37	60	3,496	17.3	29.4
1971	2,329	1,186	3,515	---	128	3,643	30	61	3,429	16.8	32.0
1972	2,439	1,094	3,533	---	127	3,660	33	48	3,451	16.7	31.9
1973 4/	2,506	939	3,445	---	127	3,572	34	20	3,444	16.5	36.5
1974					115						

1/Less than 500,000 pounds.

2/Includes estimates of foreign donations, not reported by Census.

3/Not reported prior to 1965.

4/Preliminary.

Table 16.--Shortening: Production, fats and oils used in manufacture, and domestic consumption, 1950-73

Calendar year	Shortening production	Fats and oils consumed in shortening manufacture									Shortening domestic consumption (civilian)	
		Total fats and oils	Edible vegetable oils (% of total)					Animal fats (% of total)				
			Soybean	Cottonseed	Palm	Coconut	Total 1/	Lard	Beef fats	Total	Total	Per capita
	Mil. lb.	Mil. lb.	Percent	Percent	Pct.	Percent	Percent	Pct.	Percent	Percent	Mil. lb.	Pounds
1950	1,710	1,727	48.7	31.8	---	---	88.0	10.2	1.8	12.0	1,656	11.0
1951	1,403	1,405	52.0	23.8	---	1.4	84.1	14.2	1.7	15.9	1,365	9.0
1952	1,611	1,613	52.8	24.1	---	2.0	83.5	14.4	2.1	16.5	1,562	10.2
1953	1,675	1,681	53.7	22.4	---	.1	83.7	13.5	2.8	16.3	1,597	10.2
1954	1,961	1,969	46.6	32.5	---	.8	88.2	7.2	4.6	11.8	1,870	11.8
1955	1,975	1,988	46.8	22.1	---	.2	77.3	16.8	5.9	22.7	1,863	11.5
1956	1,842	1,855	42.2	17.4	---	.3	67.7	24.7	7.6	32.3	1,797	10.9
1957	1,808	1,824	43.6	14.9	---	.4	66.9	20.6	12.5	33.1	1,756	10.4
1958	2,006	2,011	52.5	11.9	---	.6	71.7	15.8	12.5	28.3	1,935	11.3
1959	2,252	2,244	50.9	14.3	---	.9	66.6	22.0	11.4	33.4	2,196	12.6
1960	2,313	2,302	50.8	15.9	---	.4	67.5	20.9	11.6	32.5	2,238	12.6
1961	2,456	2,459	47.2	14.5	.4	1.1	64.3	21.6	14.1	35.7	2,311	12.8
1962	2,689	2,696	50.5	13.6	.6	1.0	66.3	21.2	12.5	33.7	2,469	13.4
1963	2,584	2,611	47.0	12.6	.5	.7	61.5	22.7	15.8	38.5	2,525	13.5
1964	2,664	2,693	51.5	14.0	.4	.7	67.5	16.5	16.0	32.5	2,598	13.7
1965	2,792	2,768	53.1	14.6	.5	.7	69.5	16.5	14.0	30.5	2,695	14.1
1966	3,181	3,192	54.3	11.6	1.2	1.2	69.2	15.4	15.4	30.8	3,079	15.9
1967	3,226	3,243	53.7	8.4	1.9	1.2	66.6	17.8	15.6	33.4	3,108	15.9
1968	3,312	3,326	55.4	7.5	2.2	1.2	67.3	18.1	14.6	32.7	3,211	16.3
1969	3,481	3,505	59.9	7.1	3.1	1.3	72.6	13.6	13.8	27.4	3,398	17.1
1970	3,588	3,599	60.6	7.7	2.4	1.2	72.9	12.0	15.1	27.1	3,496	17.3
1971	3,515	3,513	58.3	4.8	5.0	1.6	70.5	14.8	14.7	29.5	3,429	16.8
1972	3,533	3,640	56.1	4.6	7.9	2.1	71.6	11.9	16.5	28.4	3,451	16.7
1973 2/	3,445	3,638	58.3	4.9	9.6	2.3	76.4	9.2	14.4	23.6	3,444	16.5
1974												

1/Includes small quantities of peanut oil, corn oil, safflower oil, vegetable stearine and glycerides, not shown separately.

2/Preliminary.

Table 17.--Butter (actual weight): Supply, disposition, and price, 1950-73

Calendar year	Supply: Production: Creamery	Supply: Production: Farm	Supply: Production: Total	Supply: Imports	Supply: Stocks Jan. 1 1/	Supply: Total supply	Disposition: Exports and shipments to U.S. Territories	Disposition: Domestic disappearance: Total	Disposition: Domestic disappearance: Direct use as butter: Military procurement	Disposition: Domestic disappearance: Direct use as butter: Civilian	Disposition: Domestic disappearance: Direct use as butter: Civilian per capita	Price per pound: Creamery grade A Chicago
					--Million pounds--						Pounds	Cents
1950	1,386	262	1,648	2/	133	1,781	28	1,648	34	1,614	10.7	61.7
1951	1,203	240	1,443	2/	105	1,548	24	1,497	52	1,445	9.6	69.2
1952	1,188	214	1,402	2/	27	1,429	2	1,354	38	1,316	8.6	72.2
1953	1,412	195	1,607	2/	73	1,680	26	1,372	43	1,329	8.5	65.9
1954	1,449	179	1,628	1	282	1,911	57	1,475	65	1,410	8.9	59.7
1955	1,383	162	1,545	1	379	1,925	224	1,537	77	1,460	9.0	57.4
1956	1,413	140	1,553	3	163	1,719	184	1,510	70	1,439	8.7	59.2
1957	1,414	119	1,533	3	25	1,561	13	1,461	55	1,406	8.4	59.6
1958	1,390	96	1,486	2	87	1,575	38	1,468	50	1,418	8.3	58.7
1959	1,334	76	1,411	2	69	1,482	29	1,422	51	1,371	7.9	59.8
1960	1,373	63	1,436	3	31	1,470	10	1,382	50	1,332	7.5	59.0
1961	1,484	52	1,536	2	77	1,615	9	1,381	46	1,335	7.4	60.5
1962	1,537	42	1,579	2	3/225	1,806	4/42	1,405	64	1,341	7.3	58.6
1963	1,420	34	1,454	2	3/359	1,815	4/199	1,345	64	1,281	6.9	58.2
1964	1,442	27	1,469	2	3/271	1,742	4/307	1,364	66	1,297	6.8	59.1
1965	1,325	21	1,346	2	71	1,419	75	1,292	60	1,232	6.4	60.2
1966	1,112	16	1,128	2	52	1,182	18	1,132	33	1,099	5.7	66.6
1967	1,225	13	1,238	2	32	1,272	7	1,096	21	1,076	5.5	66.7
1968	1,165	10	1,175	2	169	1,346	40	1,189	72	1,117	5.7	66.9
1969	1,118	8	1,126	2	117	1,245	27	1,130	50	1,081	5.4	67.6
1970	1,137	6	1,143	2	89	1,234	9	1,105	45	1,061	5.3	69.4
1971	1,143	---	1,143	2	119	1,264	99	1,069	30	1,039	5.1	68.4
1972	1,110	---	1,110	2	97	1,209	54	1,048	29	1,019	4.9	68.6
1973 5/	922	---	922	45	107	1,074	17	1,011	15	996	4.8	69.8
1974					46							

1/Includes stocks held by U.S. Department of Agriculture.
2/Less than 500,000 pounds.
3/Includes estimates of butter oil, ghee, and canned butter.
4/Includes estimates of butter, butter oil, and ghee shipped under foreign donations program.
5/Preliminary.

Table 18.--Lard: Supply, disposition, and price, 1950-73

Calendar year	Supply: Production: Federally inspected	Supply: Production: Other commercial	Supply: Production: Farm	Supply: Production: Total	Supply: Stocks Jan. 1	Supply: Total 1/	Disposition: Exports and shipments: Exports	Disposition: Exports and shipments: Shipments	Disposition: Exports and shipments: Total	Disposition: Domestic disappearance: Total	Disposition: Domestic disappearance: Direct use: Total	Disposition: Domestic disappearance: Direct use: Per civilian	Price per pound: Loose Chicago
					--Million pounds--							Pounds	Cents
1950	2,009	309	313	2,631	131	2,762	467	56	523	2,112	1,891	12.6	11.8
1951	2,225	342	296	2,863	127	2,990	689	54	743	2,143	1,855	12.3	16.1
1952	2,234	378	269	2,881	104	2,985	634	60	694	2,080	1,817	11.8	9.9
1953	1,812	310	233	2,355	211	2,566	423	53	476	2,016	1,772	11.4	11.9
1954	1,831	290	209	2,330	74	2,404	465	56	521	1,779	1,627	10.2	15.7
1955	2,140	312	208	2,660	104	2,764	562	57	620	1,998	1,639	10.1	10.6
1956	2,255	304	198	2,757	147	2,904	611	60	672	2,121	1,623	9.8	11.1
1957	2,080	287	180	2,547	112	2,659	501	62	563	1,994	1,589	9.4	12.3
1958	1,982	271	173	2,426	101	2,527	389	66	455	1,977	1,640	9.6	11.4
1959	2,309	300	171	2,780	95	2,875	605	68	673	2,078	1,536	8.8	7.9
1960	2,127	292	143	2,562	124	2,686	620	61	681	1,912	1,358	7.6	8.8
1961	2,118	266	130	2,514	94	2,608	417	69	485	2,015	1,393	7.7	9.6
1962	2,104	261	111	2,476	110	2,586	422	66	488	1,970	1,314	7.1	8.7
1963	2,117	256	100	2,473	128	2,601	538	57	594	1,887	1,190	6.4	8.3
1964	2,153	235	85	2,473	119	2,592	682	64	747	1,718	1,193	6.3	9.7
1965	1,772	208	65	2,045	127	2,172	251	75	325	1,785	1,225	6.4	11.7
1966	1,696	202	32	1,929	62	1,991	158	63	220	1,670	1,071	5.5	11.2
1967	1,835	209	32	2,076	100	2,176	189	58	247	1,778	1,055	5.4	7.8
1968	1,862	170	30	2,062	151	2,213	175	58	234	1,886	1,106	5.6	6.2
1969	1,755	124	25	1,904	94	1,998	262	67	329	1,599	1,011	5.1	9.7
1970	1,776	112	25	1,913	70	1,983	366	53	419	1,482	939	4.7	11.6
1971	1,830	106	24	1,960	82	2,042	282	62	345	1,598	880	4.3	10.8
1972	1,464	76	18	1,559	100	1,659	164	25	189	1,400	796	3.8	10.4
1973 2/	1,181	55	18	1,254	51	1,305	113	8	121	1,140	714	3.4	19.8
1974					44								

1/Includes imports, which were less than 500,000 pounds in all years except 1952, when 7 million pounds were imported.

2/Preliminary.

Table 19.--Margarine (actual weight): Supply, disposition, and price, 1950-73

Calendar year	Supply						Disposition				Price per pound
	Production				Stocks, Jan. 1	Total	Exports and shipments	Domestic disappearance			Colored, delivered Eastern United States
	One pound unit		All other units	Total				Military	Civilian		
	Soft	Total							Total	Per capita	
	--Million pounds--									Pounds	Cents
1950	---	---	---	937	13	950	7	11	918	6.1	---
1951	---	---	---	1,041	14	1,055	6	34	996	6.6	---
1952	---	---	---	1,286	19	1,305	7	54	1,219	7.9	27.1
1953	---	---	---	1,292	25	1,317	9	30	1,256	8.1	27.8
1954	---	---	---	1,364	22	1,386	8	5	1,346	8.5	27.8
1955	---	---	---	1,334	27	1,361	8	6	1,323	8.2	27.3
1956	---	---	---	1,370	24	1,394	9	4	1,354	8.2	28.0
1957	---	1,363	100	1,463	28	1,490	10	8	1,446	8.6	28.0
1958	---	1,464	109	1,573	26	1,599	9	3	1,549	9.0	26.9
1959	---	1,485	126	1,611	38	1,649	10	2	1,604	9.2	25.2
1960	---	1,556	139	1,695	34	1,729	10	11	1,676	9.4	23.8
1961	---	1,583	141	1,724	33	1,756	8	7	1,708	9.4	26.8
1962	---	1,578	148	1,726	33	1,759	9	2	1,709	9.3	25.6
1963	---	1,632	162	1,794	39	1,833	9	2	1,785	9.6	23.8
1964	---	1,679	178	1,857	36	1,893	9	2	1,835	9.7	24.1
1965	---	1,726	178	1,904	48	1,952	8	11	1,891	9.9	26.1
1966	---	1,882	228	2,110	42	2,152	14	46	2,038	10.5	26.6
1967	---	1,859	255	2,114	53	2,167	15	47	2,046	10.5	25.7
1968	282	1,898	243	2,141	60	2,201	10	12	2,130	10.8	25.6
1969	356	1,945	237	2,182	49	2,231	12	13	2,154	10.8	26.0
1970	422	1,975	255	2,230	52	2,282	13	2	2,223	11.0	28.9
1971	481	1,999	291	2,290	46	2,336	13	1	2,264	11.1	30.8
1972	542	2,060	301	2,361	57	2,418	13	1	2,335	11.3	31.3
1973 1/	622	2,099	258	2,357	69	2,426	13	4	2,348	11.3	34.0
1974					61						

1/Preliminary.

Table 20.--Margarine: Production, fats and oils used in manufacture, and domestic consumption, 1950-73

Calendar year	Margarine production (actual weight)	Fats and oils consumed in margarine manufacture										Margarine domestic consumption (civilian)		
		Total	Edible vegetable oils (% of total)					Animal fats (% of total)				Total (actual weight)	Per capita	
			Soybean	Cottonseed	Corn	Safflower	Total 1/	Lard	Beef fats	Total			Actual weight	Fat content
	Mil. lb.	Mil. lb.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.		Mil. lb.	Lb.	Lb.
1950	937	764	40.8	54.7	0.1	---	98.3	0.5	1.2	1.7		918	6.1	4.9
1951	1,041	851	56.2	39.2	1.9	---	98.8	.5	.8	1.2		906	6.6	5.3
1952	1,286	1,046	62.3	33.8	2/	---	98.8	.5	.8	1.2		1,219	7.9	6.4
1953	1,292	1,049	69.2	26.2	.1	---	98.0	.8	1.2	2.0		1,256	8.1	6.5
1954	1,364	1,106	60.1	35.9	2/	---	98.5	.6	.9	1.5		1,346	8.5	6.9
1955	1,334	1,075	69.4	25.9	2/	---	98.0	1.2	.8	2.0		1,323	8.2	6.6
1956	1,370	1,111	65.9	25.5	.1	---	96.7	2.8	.5	3.3		1,354	8.2	6.6
1957	1,463	1,182	73.9	20.1	2/	---	97.0	2.2	.8	3.0		1,446	8.6	6.9
1958	1,573	1,269	84.3	11.4	.1	---	98.1	1.3	.6	1.9		1,549	9.0	7.3
1959	1,611	1,291	84.7	9.6	1.5	---	96.7	2.8	.6	3.3		1,604	9.2	7.4
1960	1,695	1,367	80.8	9.9	4.0	---	95.5	4.1	.4	4.5		1,676	9.4	7.6
1961	1,724	1,386	76.6	10.0	6.4	---	94.3	5.2	.4	5.7		1,708	9.4	7.6
1962	1,726	1,394	75.9	7.6	7.1	.4	94.3	5.0	.7	5.7		1,709	9.3	7.5
1963	1,794	1,451	72.3	7.2	9.4	1.5	93.4	5.8	.8	6.6		1,785	9.6	7.7
1964	1,857	1,500	75.9	6.7	10.0	.8	94.9	4.3	.9	5.1		1,835	9.7	7.8
1965	1,904	1,535	72.4	7.4	10.5	.7	92.5	6.5	.9	7.5		1,891	9.9	8.0
1966	2,110	1,710	75.7	6.2	9.2	2.7	94.9	4.8	.3	5.1		2,038	10.5	8.5
1967	2,114	1,703	73.3	4.6	10.3	2.5	92.1	7.3	.6	7.9		2,046	10.5	8.4
1968	2,141	1,720	72.1	4.1	10.4	2.4	90.2	8.9	.9	9.8		2,130	10.8	8.7
1969	2,182	1,744	76.4	4.3	9.9	2.5	94.3	5.0	.7	5.7		2,154	10.8	8.6
1970	2,230	1,794	78.6	3.8	10.3	1.2	94.5	5.0	.5	5.5		2,223	11.0	8.9
1971	2,290	1,831	75.6	3.4	10.2	1.0	90.8	8.7	.5	9.2		2,264	11.1	8.9
1972	2,361	1,883	77.5	3.5	10.3	1.1	92.7	6.8	.5	7.3		2,335	11.3	9.0
1973 3/	2,357	1,888	78.9	3.3	11.3	1.7	95.4	3.8	.8	4.6		2,348	11.3	9.0
1974														

1/Includes small quantities of peanut oil, coconut oil, and vegetable stearine that are not shown separately.

2/Less than .05 percent.

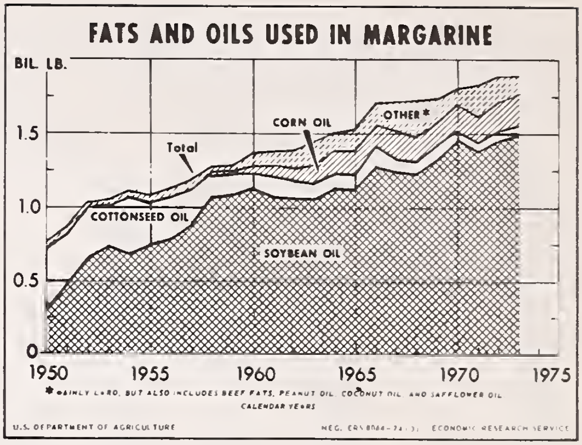
3/Preliminary.

consumption last year was more than double butter's 5 pounds. Twenty years ago butter usage was nearly twice as much as margarine.

Increased production and consumption of margarine were made possible by the sharp growth in domestic output of edible vegetable oils—mainly soybean oil. A most significant development has been the sharp expansion in the use of corn and safflower oils as a margarine ingredient, along with increased production of "soft" margarines (tables 19 and 20).

1974 Outlook

U.S. consumption of food fats and oils in calendar 1974 is projected to rise to about 12 billion pounds or some 5% above last year. Use of butter and lard will continue to trend downward while edible oil's share of the market will be boosted. Soybean oil will extend its lead as the major edible oil—possibly to 57% of the food fat market. Imports of coconut and palm oils for use in food products probably will decline, as they will be less competitive due to short world supplies, high prices, and increased shipping costs.



* MAINLY LARD, BUT ALSO INCLUDES BEEF FATS, PEANUT OIL, COCONUT OIL, AND SAFFLOWER OIL.
CALENDAR YEARS

U.S. DEPARTMENT OF AGRICULTURE NEG. ERS 8044-74 (3) ECONOMIC RESEARCH SERVICE

The per capita use of food fats is projected at 54 pounds—about a half a pound greater than in 1973—with the gain largely in salad and cooking oils. With the slowdown in economic activity, increased unemployment, and continued high prices for fats and oils, many consumers will make more efficient use of their food fat products.

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REGIONAL SOYBEAN ACREAGE RESPONSE ANALYSIS AND PROJECTIONS FOR 1974[1]

by

R. Samuel Evans and David E. Kenyon*

ABSTRACT: Regional acreage response equations were developed to measure the impact of price, government programs, and lagged acreage on harvested soybean acreage. Effective prices for soybeans, corn, cotton, and oats were computed incorporating market prices, support prices and the main supply increasing or decreasing effects of allotments, diversion payments, and set-aside provisions. Special attention was given to the impact on harvested soybean acreage of the Feed Grain Programs of 1961-70. The equations were developed to permit projections of soybean acreage based on data available through March of the current year. For the period 1948 to 1973, the model explains 99 percent of the variation in soybean acreage, and for the period 1966-73, projections averaged within three-fourth million acres of actual harvested acreage.

KEY WORDS: Soybeans, supply functions, supply projections, acreage allotments, acreage diversions, acreage set-asides.

The recent high prices for soybeans, soybean meal, and soybean oil have increased pressure to accurately predict future supplies and prices. To help meet this need, we developed and analyzed regional acreage supply functions for soybeans for 1948-73. Particular attention is given to the measurement and analysis of the effects of government commodity price—support programs on harvested soybean acreage. Detailed attention was given to the effect of the feed grain programs of the 1960's and the set—aside programs of 1971-73 on soybean acreage harvested. The supply model used to determine the regional acreage response equations is briefly presented. The main emphasis is placed on the results obtained and the ability of the model to project harvested acreage 6 to 9 months in advance.

The Supply Model

Several recent studies of acreage supply response (1 through 6)[2] have included the impact of government programs on acreage response either independently or jointly with price variables. This study follows a similar procedure. Soybeans, unlike the other major grain and oilseed crops, have not been tied to acreage restrictions of any kind. However, soybean production is affected by acreage restricting programs applied to competing crops such as corn and cotton. Although soybeans have not been permitted on diverted acreage, soybeans competed effectively with other crops for the remaining non-restricted acreage. Consideration of these program provisions led to the calculation of effective support prices for those crop prices included in the regional functions.

The general form of each regional acreage supply function for soybeans is:

$$A = f(PSE, PCE, DV, A(-1))$$

where

A = harvested acreage of soybeans
PSE = effective price of soybeans
PCE = effective price of competing crop in the region

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[2] Numbers in parentheses are references listed at the end of this paper.

DV = 0-1 dummy variable to determine the effect of the feed grain acreage diversion program in 1961-70

A(-1)= harvested acreage of soybeans last year.

Effective Prices

The relevant effective price for each crop considered is generally the higher of the adjusted lagged market price or the current support rate. Market prices for each crop were adjusted on the basis of applicable support rates, allotments, diversions payments and set-aside provisions. For example, the effective price of cotton (PCTE) is determined as:

$$PCTE = PCTS\left(\frac{A}{B}\right)$$

where

PCTS = the support price for cotton

A = national cotton acreage allotment

B = historical base acreage.

Since the national cotton acreage allotment (A) was less than the historical base acreage (B), the impact of including these program provisions in the calculation of the effective price of cotton is to reduce the price. At the lower price, less cotton is supplied, generating exactly the effect the government program was designed to accomplish. Similar procedures were used to compute effective prices for the other crops.[3]

Diversion Payments

Increases or decreases in the quantity of feed grain acreage diverted under the 1961-70 Feed Grain Programs should have little direct effect on soybean acreage since soybean production was not permitted on diverted acreage. When acreage was taken out of diversion and made eligible for production, soybeans were not substituted for corn since price support payments were not made on that portion of the feed grain base devoted to soybeans. However, by restricting corn acreage, the diversion payment program had the indirect effect of making soybeans more competitive with the other feed grains, cotton and hay. In other words, this program stimulated the expansion of soybean production on land that might have otherwise been planted primarily to corn. A 0-1 dummy variable was included in the model to determine the impact on soybean acreage of the feed grain programs of 1961-70.

Lagged Soybean Acreage

A 1-year lag in acreage is included in each equation in recognition of rigidities in the system that normally restrict rapid adjustment. On a regional basis, fixed machinery complements, land restrictions, management expertise, and market considerations restrict the amount of yearly adjustment in response to relative price changes. Thus, lagged acreage is a good indication of short-run changes in acreage. Both 1-year and 2-year lags on harvested acreage were included in each equation. The 2-year lag variable was significant only in the Corn Belt Region.

Statistical Results

The results of estimating the regional supply equations are in table 21. The most significant variable in terms of affecting acres of soybeans harvested was the lagged acreage variable in each equation. The effective price of soybeans had the expected positive sign in all regions and was statistically significant at the 5 percent level in all equations except the Delta. The effective price of cotton as defined determines soybean acreage in the Delta Region rather than the price of soybeans.

The effective price of corn had a significant impact in the Corn Belt, Lakes, and Plains regions. Increases in effective corn prices produced significant reductions in soybean acreage harvested. In the Atlantic and other regions, the effective price of oats entered the model as the crop affecting the acreage of soybeans harvested. An analysis of acreage trends in these two regions revealed that the expansion of soybean acreage has come almost entirely at the expense of oat acreage.

The diversion payment dummy variable was statistically significant at the 5 percent level in the Corn Belt and Plains regions and entered the Lakes Region equation as an important variable. This is consistent with the hypothesis that soybean acreage expanded as a result of restricted corn acreage. The diversion payment dummy variable was not significant in those regions where the effective corn price did not enter the equation as a competitive crop with soybeans. The absolute impact on soybean acreage harvested in a given year is relatively small compared with the effects of the other variables. However, due to the lagged acreage variable, the aggregate impact of the Feed Grain Programs during 1961-70 was to increase soybean acreage by approximately 10 million acres. This is approximately one-half of the total increase in soybean acreage from 1960 to 1970.

A U.S. aggregate model was obtained by horizontally summing the regional supply functions. The aggregate model explains approximately 99 percent of the variation in total soybean acreage.[4]

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[3] The procedures used in developing effective prices may be obtained on request from the authors.

[4] This estimate was computed by weighting the R^2's for each region by the proportion of that region's acreage variance to the total acreage variance.

Table 21.--Regional acreage response equation for soybeans (dependent variable is A), based on 1948-73 data

Region	PSE	PCE	POE	PCTE	DV	A(-1)	A(-2)	Constant	R^2	D.W.	S.E.
											Acres
Corn Belt	2644	-4856			496	0.5483	0.2978	2181	0.995	2.26	446,400
(t)	10.9	-7.6			2.1	4.2	2.4	2.5			
Lakes	735	-1411			206	0.6596		820	0.954	1.87	269,600
(t)	6.4	-4.8			1.5	8.0		1.9			
Plains	707	-954			283	0.5917		-123	0.960	2.35	175,900
(t)	8.8	-5.5			2.8	6.7		-0.5			
Delta				-5217		0.9668		1553	0.987	2.21	347,600
(t)				-2.9		32.2		3.4			
Atlantic	374		-1769			0.8518		632	0.985	2.23	119,100
(t)	4.4		-3.5			16.2		2.3			
Others	425		-1089	-1695		0.9573		258	0.989	1.76	156,600
(t)	3.5		-1.7	-1.6		20.5		0.9			

A = Harvested soybean acreage, thousands of acres.
PSE = Effective soybean price, $/bu.
PCE = Effective corn price, $/bu.
POE = Effective oats price, $/bu.
PCTE = Effective cotton price, $/lb.
DV = Dummy variable for feed grain acreage diversion program (1961-70 = 1, otherwise = 0).
A(-1) = Harvested acreage last year, thousands of acres.
A(-2) = Harvested acreage two years previous, thousands of acres.
t = t test value.
Corn Belt = Ohio, Indiana, Illinois, Iowa, Missouri.
Lakes = Michigan, Minnesota, Wisconsin.
Plains = Kansas, Nebraska, North Dakota, South Dakota.
Atlantic = Virginia, Maryland, Delaware, North Carolina, South Carolina.
Delta = Arkansas, Mississippi, Louisiana.
Other = Georgia, Kentucky, Tennessee, Alabama, New York, New Jersey, West Virginia, Texas, Oklahoma, Florida, Pennsylvania.

The effect of a $0.10 increase in effective prices on U.S. harvested soybean acreage was:

Effective soybean price:	488,500 acres
Effective corn price:	-722,100 acres
Effective cotton price:	-691,200 acres
Effective oats price:	-285,800 acres

The average aggregate effect of the Feed Grain Program during 1961-70 was to add 985,000 acres to U.S. harvested soybean acreage per year, or 9,850,000 acres over the life of the program.

Evaluation of the Model

Figure 1 compares actual and predicted (fitted) harvested soybean acreage for 1948-73. In addition, for 1966 through 1974, harvested acreage is projected based on the information available up through March of the preceding crop year. In other words, the equation estimated from data available from October 1948 to March 1965 is used to project 1966 harvested acreage, whereas the prediction of 1966 soybean acreage is based on the soybean supply response equation estimated from data covering the time period October 1948 to March 1973. Actual, predicted, and projected soybean acreages are compared in Figure 2 for the period 1966 to 1974. Overall, the model is quite accurate in projecting U.S. harvested soybean acreage 6 months in advance. During 1966-73, on the average the model missed U.S. soybean acreage by 747,630 acres with the largest error being 1,148,000 acres and the smallest error being 342,000 acres.

Estimates for 1974

With enactment of the Agricultural and Consumer Protection Act of 1973, the concept of target or guaranteed prices was implemented. For 1974, the Secretary of Agriculture has removed all acreage restrictions for all crops considered in the regional supply functions, and the average market prices through mid-February 1974 exceeded all target and support price levels. Therefore, the effective price for all crops was the average market price from October 1973 to mid-February 1974. The average prices used in projecting 1974 soybean acreage are:

a) soybeans, $5.69/bu.
b) corn, $2.48/bu.
c) oats, $1.26/bu. and,
d) cotton, $0.54/lb.

The effective price of cotton was adjusted to prohibit a 145 percent increase in acreage above 1970 acreage. Given these price estimates and 1973 soybean acreage, the following projections of regional and U.S. harvested soybean acreage for 1974 were obtained:

Region	*Acres*
Corn Belt	28,627,000
Lakes	5,035,000
Plains	3,687,000
Delta	8,398,000
Atlantic	3,533,000
Others	5,298,000
U.S.	54,578,000

The model projects a harvested soybean acreage of approximately 54½ million acres in 1974. On March 1 farmers indicated to the USDA they intend to plant 55 million acres of soybeans this spring, down 2.3 million from 1973. Based on the historical ratio of 0.979 harvested to planted acres, this converts to about 54 million harvested acres. The American Soybean Association survey of planting intentions reported in the January 1974 *Soybean Digest* indicates farmers will plant 51.4 million acres or harvest about 50.3 million acres. The *Farm Journal*, based on 8,000 responses from farmers in states representing 95 percent of 1973 soybean acreage, predicts a 2 percent drop in planted acreage compared to 1973, or 56.1 million planted acres and 54.9 million harvested acres in 1974. These various estimates indicate harvested soybean acreage in 1974 may total approximately 54 million acres.

Although the model coefficients were estimated to make projections in March of each year, it can be used earlier for preliminary projections. For example, in January 1974 the model projected a harvested soybean acreage of 54.9 million acres. The current projection of 54.6 million acres is based on data through mid-February 1974, a decline of 0.5 percent from the January forecast. Earlier projections could be made based on preliminary harvested acres, expected prices of the relevant crops, and anticipated government programs. For example, 1975 harvested acreage could be projected based on data available through mid-August 1974. However, the accuracy of the model to make projections this far in advance has not been evaluated.

Three characteristics of the acreage response model indicate that the 1974 harvested acreage estimate may be a little high. First, the current high wheat prices are not accounted for in the model. Previous wheat price levels did not enter significantly into any of the equations, but some farmers may substitute wheat for soybeans at current price levels. Second, restricting cotton acreage to 70 percent of historical base acreage may be unrealistic given the tremendous rise in cotton prices in recent months. And third, since the lagged acreage response variable is the major determinant of projected acreage, any time a large increment in acreage from one year to the next occurs like from 1972 to 1973, very large changes in the relative prices of the competing

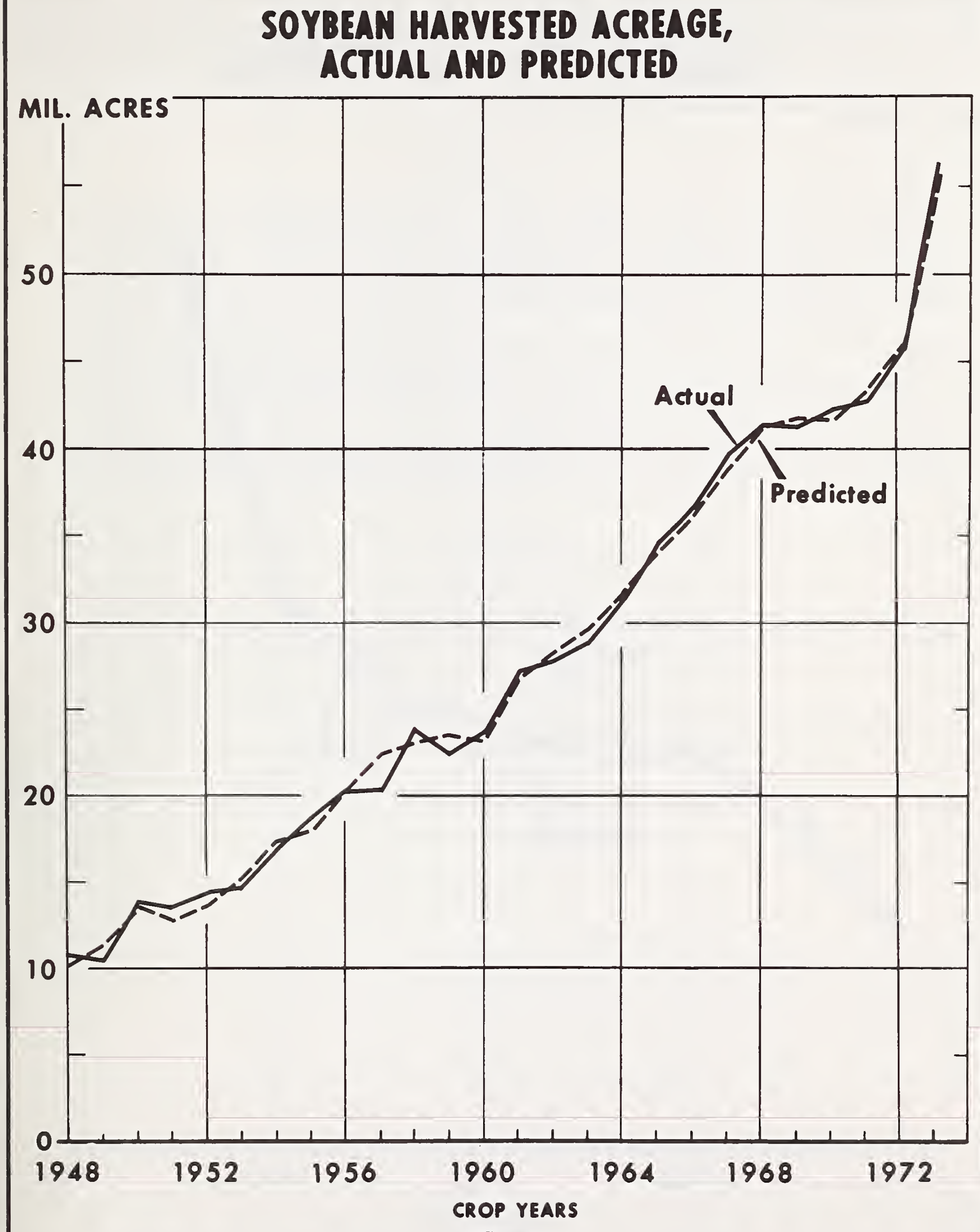

Figure 1

U.S. DEPARTMENT OF AGRICULTURE NEG. ERS 534-74 (3) ECONOMIC RESEARCH SERVICE

SOYBEAN HARVESTED ACREAGE, ACTUAL, PREDICTED AND PROJECTED

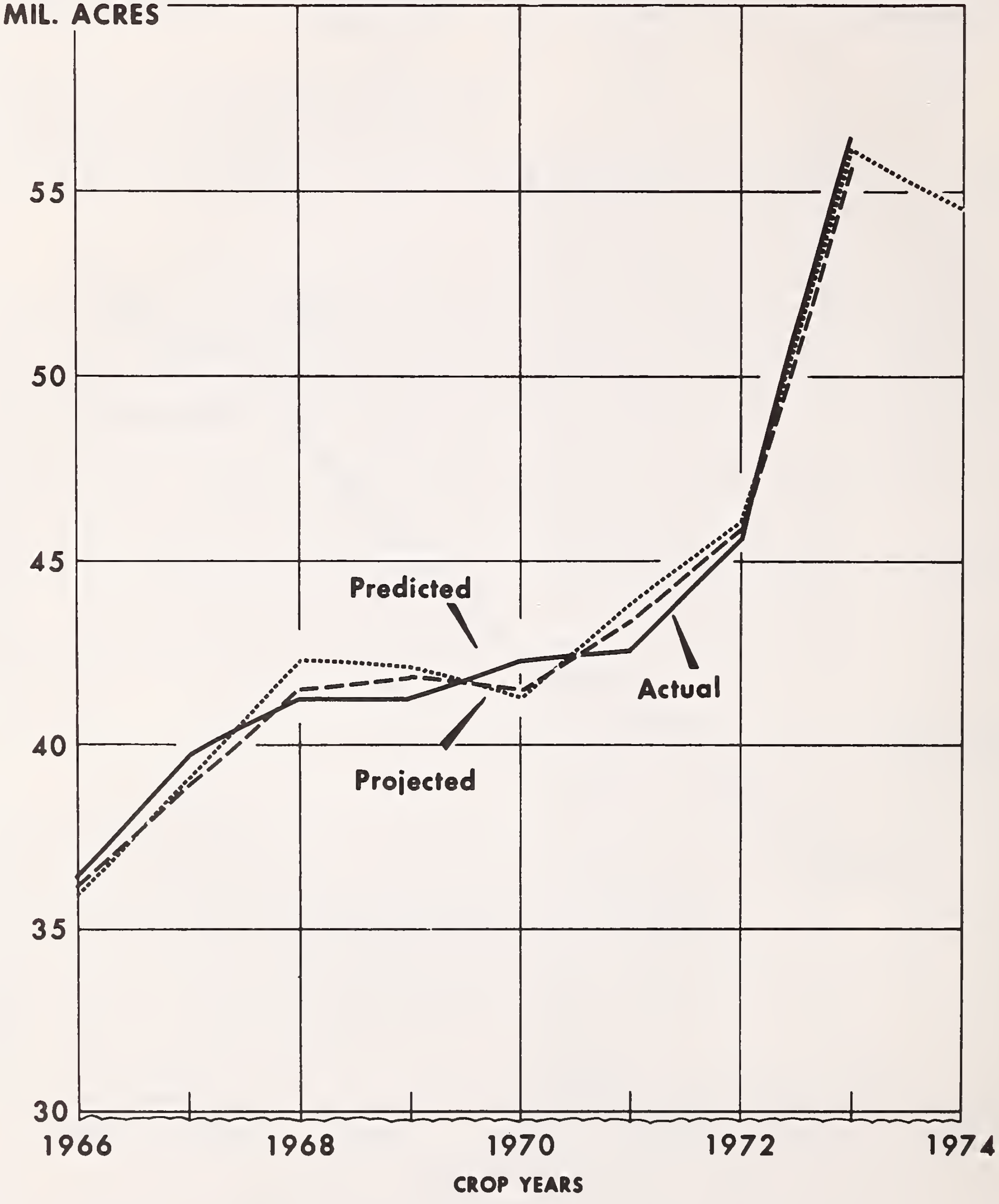

Figure 2

U.S. DEPARTMENT OF AGRICULTURE NEG. ERS 533-74 (3) ECONOMIC RESEARCH SERVICE crops are necessary to offset this effect. Consideration of these factors indicates that the projection of 1974 harvested soybean acreage may be overestimated. In addition planting decisions are not yet complete, and the effects of weather conditions this spring, fertilizer supplies, and the energy shortage may alter the amount of soybeans planted and harvested in 1974.

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Table 22.--Domestic disappearance of food and nonfood fats and oils, by end products, total and per person, year beginning October by quarters, with comparisons,

Year and Quarter	Unit	Food							Nonfood				All products (fat content)
		Butter (actual weight)	Margarine (actual weight)	Lard (direct)	Baking and frying fats (shortening)	Salad and cooking oils	Other edible 1/	Total (fat content)	Soap 2/	Drying oils 3/	Other 4/	Total	
1971-72													
Oct.-Dec.:													
Total	Mil. lb.	300	622	197	882	831	125	2,776	104	129	1,103	1,336	4,112
Per person	Lb.	1.4	3.0	.9	4.2	4.0	.6	13.4	.5	.6	5.3	6.4	19.8
Jan.-Mar.:													
Total	Mil. lb.	255	587	202	859	872	130	2,738	203	155	979	1,337	4,075
Per person	Lb.	1.2	2.8	1.0	4.1	4.2	.6	13.1	1.0	.7	4.7	6.4	19.6
Apr.-June:													
Total	Mil. lb.	250	553	178	843	886	111	2,660	220	153	1,015	1,389	4,048
Per person	Lb.	1.2	2.7	.9	4.0	4.2	.5	12.8	1.1	.7	4.9	6.9	19.4
July-Sept.:													
Total	Mil. lb.	246	551	202	879	924	125	2,767	202	146	971	1,320	4,086
Per person	Lb.	1.2	2.6	1.0	4.2	4.4	.6	13.2	1.0	.7	4.6	6.3	19.6
Season:													
Total	Mil. lb.	1,051	2,313	780	3,464	3,512	491	10,941	730	584	4,068	5,382	16,323
Per person	Lb.	5.0	11.1	3.7	16.6	16.9	2.4	52.5	3.5	2.8	19.5	25.8	78.3
1972-73 5/													
Oct.-Dec.:													
Total	Mil. lb.	297	644	214	918	883	137	2,906	106	120	1,121	1,346	4,253
Per person	Lb.	1.4	3.1	1.0	4.4	4.2	.7	13.9	.5	.6	5.3	6.4	20.3
Jan.-Mar.:													
Total	Mil. lb.	260	618	176	883	964	131	2,856	195	156	1,014	1,365	4,221
Per person	Lb.	1.2	2.9	.8	4.2	4.6	.6	13.6	.9	.7	4.8	6.5	20.1
Apr.-June:													
Total	Mil. lb.	241	550	185	808	940	137	2,708	200	224	1,040	1,465	4,173
Per person	Lb.	1.1	2.6	.9	3.8	4.5	.6	12.9	1.0	1.1	4.9	7.0	19.8
July-Sept.:													
Total	Mil. lb.	232	534	167	831	899	116	2,627	161	191	938	1,289	3,916
Per person	Lb.	1.1	2.5	.8	3.9	4.3	.6	12.5	.8	.9	4.4	6.1	18.6
Season:													
Total	Mil. lb.	1,030	2,346	742	3,430	3,686	521	11,098	662	691	4,112	5,465	16,563
Per person	Lb.	4.9	11.2	3.5	16.4	17.6	2.5	52.8	3.2	3.3	19.6	26.0	78.9
1973-74 5/													
Oct.-Dec.:													
Total	Mil. lb.	278	651	185	902	978	121	2,929	172	103	942	1,217	4,146
Per person	Lb.	1.3	3.1	.9	4.3	4.6	.6	13.9	.8	.5	4.5	5.8	19.6
Jan.-Mar.:													
Total	Mil. lb.												
Per person	Lb.												
Apr.-June:													
Total	Mil. lb.												
Per person	Lb.												
July-Sept.:													
Total	Mil. lb.												
Per person	Lb.												
Season:													
Total	Mil. lb.												
Per person	Lb.												

1/ Includes all food fats and oils used other than butter, lard, margarine, shortening, and cooking and salad oils.

2/ Fat equivalent of soap used in synthetic rubber is included in "other industrial products." Adjusted for foreign trade and changes in stocks.

3/ Paints, varnishes, floor coverings, oilcloth, printing inks, core oils, synthetic resins, insulation, linings, packings, coated fabrics, caulking and other protective coatings.

4/ Includes use of fats and oils in chemicals, lubricants and greases, animal feeds, fatty acids, tin and terne plate, pharmaceuticals, leather, candles, synthetic organic detergents, toilet articles, and miscellaneous industrial products.

5/ Preliminary.

Table 23.--Imports and exports of fats, oils, oil-bearing materials, fat-and-oil products (in terms of oil) and oilmeals

Item	Imports for consumption					Exports 1/				
	October-January		1973		1974	October-January		1973		1974
	1972-73	1973-74	Nov.	Dec.	Jan.	1972-73	1973-74	Nov.	Dec.	Jan.
					Million pounds					
Food fats and oils										
Butter	1.7	54.9	41.2	2/	11.9	1.2	.3	2/	2/	.1
Lard	2/	---	---	---	---	66.4	44.2	15.5	5.8	9.4
Beef fats	.3	.2	.1	2/	.1	12.5	6.8	.7	3.8	.6
Total, edible animal fats	2.0	55.1	41.3	2/	12.0	80.1	51.3	16.2	9.6	10.1
Corn oil	---	2/	---	---	---	7.1	5.0	1.2	1.3	1.0
Cottonseed oil	.2	---	---	---	---	179.9	114.6	24.9	38.3	28.8
Cottonseed (17 percent)	---	---	---	---	---	.2	5.3	.5	.6	4.1
Olive oil, edible	13.4	17.7	3.8	3.1	5.4	---	---	---	---	---
Palm oil	88.1	112.8	39.2	29.8	26.4	11.4	8.2	1.2	.3	3.5
Peanut oil	2/	2/	2/	2/	---	30.8	16.4	2.9	5.4	4.2
Peanuts, shelled (43.5 percent)	---	---	---	---	---	27.2	11.2	---	5.9	5.3
Soybean oil	---	---	---	---	---	322.9	286.6	31.9	116.1	125.5
Soybeans (18.3 percent)	2/	2/	---	2/	2/	2,342.5	2,504.2	818.9	638.3	534.5
Safflower seed (36 percent)	---	---	---	---	---	18.9	22.5	.1	2/	2/
Other vegetable oils	8.4	7.1	1.4	.9	2.1	1.6	2.0	.4	.5	.6
Total, edible vegetable oils	110.1	137.6	44.4	33.8	33.9	2,942.5	2,976.0	882.0	806.7	707.5
Soap fats and oils										
Tallow, inedible	.5	3.6	1.1	1.3	.3	769.7	721.6	196.9	165.8	183.1
Greases	---	2/	---	---	2/	34.4	43.8	12.9	13.1	5.9
Fish and fish liver oils non-medicinal	2.4	1.5	.6	.5	.3	84.8	89.9	17.5	11.8	2.4
Marine mammal oils	2/	2/	---	2/	---	---	---	---	---	---
Olive oil, inedible	2/	2/	---	---	---	---	---	---	---	---
Total, slow-lathering oils	2.9	5.1	1.7	1.8	.6	888.9	855.3	227.3	190.7	191.4
Babassu oil	---	.7	---	---	.7	---	---	---	---	---
Coconut oil	224.5	210.4	64.8	74.6	24.3	2.3	7.5	1.7	2.0	1.0
Copra (64 percent)	114.6	78.1	39.6	15.5	23.0	---	---	---	---	---
Palm kernel oil	35.3	42.3	9.5	13.4	14.8	---	---	---	---	---
Total, lauric-acid oils	374.4	331.5	113.9	103.5	62.8	2.3	7.5	1.7	2.0	1.0
Drying oils										
Flaxseed (36.1 percent)	---	1.6	---	2/	1.5	101.9	4.8	.2	4.2	.2
Linseed oil	---	2/	---	2/	---	89.9	41.2	8.4	14.3	5.1
Oiticica oil	1.0	2.6	.7	.7	.7	---	---	---	---	---
Tall oil	---	---	---	---	---	57.2	62.0	13.4	14.3	17.9
Tung oil	8.8	2.5	.8	---	.7	.8	.2	2/	2/	.1
Total	9.8	6.7	1.5	.7	2.9	249.8	108.2	22.0	32.8	23.3
Other industrial oils and fats										
Castor oil	27.2	44.6	7.7	12.4	9.0	---	---	---	---	---
Fish-liver oils, medicinal	2.3	2.8	.9	.6	.6	---	---	---	---	---
Rapeseed oil	4.5	4.3	1.1	1.6	.4	---	---	---	---	---
Wool grease	2.5	2.9	.6	.6	.9	---	---	---	---	---
Other vegetable oils and fats, inedible	3.2	3.1	1.0	1.0	.5	57.1	32.2	9.3	5.9	6.1
Total	39.7	57.7	11.3	16.2	11.4	57.1	32.2	9.3	5.9	6.1
Products										
Margarine (fat content)	---	---	---	---	---	1.1	1.1	.2	.2	.4
Shortening	---	---	---	---	---	7.9	10.3	1.9	2.1	3.7
Salad products (fat content)	---	---	---	---	---	3.3	3.9	.8	.9	1.3
Soap (fat content)	1.1	1.4	.4	.2	.3	3.2	11.5	2.7	5.0	1.9
Fatty acids	4.1	6.1	2.3	.9	1.6	31.0	33.6	9.8	4.7	6.8
Total	5.2	7.5	2.7	1.1	1.9	46.5	60.4	15.4	12.9	14.1
Grand total	544.1	601.2	216.8	157.1	125.5	4,267.2	4,090.9	1,173.9	1,060.6	953.5
Glycerine	.5	.5	2/	.1	.4	18.2	16.2	4.2	5.1	3.9
Oilseed Cake and Meal:					Thousand tons					
Soybean	---	---	---	---	---	1,773.3	1,769.1	495.8	520.4	454.2
Cottonseed	.6	2.7	---	2.0	.7	1.8	36.6	9.1	10.9	16.3
Linseed	1.0	---	---	---	---	69.0	56.4	24.0	12.4	4.9
Copra	---	---	---	---	---	---	---	---	---	---
Corn	---	---	---	---	---	.2	29.8	12.9	6.4	.1
Other	5.7	10.5	2.2	3.0	5.1	20.4	36.6	6.0	7.2	18.5
Total oilmeals	7.3	13.2	2.2	5.0	5.8	1,864.7	1,928.5	547.8	557.3	494.0

1/ Includes re-exports and foreign donations but not shipments to U.S. Territories. 2/ Less than 50,000 pounds.

SOURCE: Bureau of Census.

Table 24 .--Index numbers of wholesale prices of fats and oils 1/

Item	1967=100				
	January		1973		1974
	1972	1973	November	December	January
All fats and oils	109	109	173	206	208
All fats and oils, except butter	114	114	214	165	271
Grouped by origin:					
Animal fats	109	115	174	188	193
Vegetable oils, domestic	112	96	164	232	227
Vegetable oils, foreign	94	100	238	330	331
Grouped by use:					
Butter	102	101	109	109	105
Lard	123	122	275	288	307
Lard, refined	113	121	202	217	223
Food fats other than butter	117	104	198	249	252
Food fats other than butter and lard	115	97	170	236	231
All edible fats and oils	109	103	152	178	176
Soap fats	111	130	241	288	302
Drying oils	91	108	194	263	261
Other industrial	99	111	233	276	304
All industrial	108	126	234	284	295
Edible vegetable oils, grouped by degree of processing:					
Crude	114	96	165	232	228
Refined	121	110	159	209	226
End products	122	120	165	169	177
Margarine	122	122	148	148	162
Shortening, 3 lb. tin	124	120	162	162	162
Shortening, 440 lb. drum	118	119	199	216	219

1/ The year 1967 has been established as the new standard reference base period for general purpose index numbers prepared by Federal agencies. Index numbers based on 1967=100 were converted from the indexes based on 1957-59=100 previously published in this report.

Table 25 .--Prices received by farmers and prices at terminal markets for specified oil-bearing materials and oilmeals

Item	Unit	February		1973	1974	
		1972	1973	December	January	February
				-- Dollars --		
OILSEEDS						
Copra, Philippines, c.i.f. Pacific Coast	Short ton	---	---	---	---	---
Cottonseed, United States average	Short ton	54.30	51.90	98.70	100.00	101.00
Flaxseed, No. 1, Minneapolis	Bushel	2.72	4.52	9.22	10.06	10.67
Flaxseed, United States average	Bushel	2.42	4.15	8.63	9.36	10.10
Peanuts, United States average (farmers' stock)	100 lb.	---	---	16.50	16.50	---
Peanuts, Virginias' No. 1, shelled, Va.-N.C. 1/	100 lb.	23.75	25.25	27.12	27.41	30.03
Peanuts, Runners No. 1, shelled, Southeast 1/	100 lb.	23.38	24.12	26.12	27.22	30.88
Peanuts, Spanish No. 1, shelled, Southeast 1/	100 lb.	23.50	24.12	27.50	27.77	33.86
Peanuts, Spanish No. 1, shelled, Southwest 1/	100 lb.	23.50	24.25	27.25	28.30	34.11
Soybeans, No. 1, Yellow, Chicago	Bushel	3.18	5.81	5.95	6.17	6.39
Soybeans, No. 1, Yellow, Illinois country shipping points	Bushel	3.14	5.80	5.92	6.19	6.35
Soybeans, United States average	Bushel	3.00	5.49	5.65	5.87	6.07
OILMEALS (bulk)						
Copra meal, 20 percent protein, Los Angeles	Short ton	80.00	92.50	N.A.	N.A.	N.A.
Cottonseed meal, 41 percent protein, Memphis	Short ton	74.40	168.75	182.80	159.50	119.40
Cottonseed meal, 41 percent protein, Chicago	Short ton	84.70	N.A.	N.A.	N.A.	N.A.
Cottonseed meal, 41 percent protein, Atlanta	Short ton	79.60	179.30	191.00	165.75	128.25
Cottonseed meal, 41 percent protein, Ft. Worth	Short ton	83.20	170.00	186.10	171.90	129.00
Fish meal, 60 percent protein, bulk, New York 2/	Short ton	161.80	418.75	587.50	538.00	446.25
Fish meal, 60 percent protein, bulk, Los Angeles 3/	Short ton	138.00	340.50	520.00	467.20	394.10
Linseed meal, 34 percent protein, Minneapolis	Short ton	66.20	159.75	154.25	157.40	155.25
Linseed meal, 34 percent protein, New York	Short ton	N.A.	N.A.	N.A.	N.A.	N.A.
Peanut meal, 50 percent protein, f.o.b. Southeastern mills	Short ton	75.00	---	---	---	---
Safflower meal, 20 percent solvent, San Francisco	Short ton	36.20	64.25	85.70	88.75	90.90
Soybean meal, 44 percent protein, Chicago	Short ton	91.00	225.30	198.80	178.80	166.80
Soybean meal, 44 percent protein, Decatur	Short ton	84.80	218.75	192.00	172.00	160.00
Soybean meal, 44 percent protein, Atlanta	Short ton	93.40	233.10	208.00	182.50	168.40
Soybean meal, 44 percent protein, Memphis	Short ton	86.70	222.40	199.50	181.40	165.00
Soybean meal, 50 percent protein, Decatur 4/	Short ton	91.50	240.00	223.00	192.40	175.25
Soybean meal, 50 percent protein, Memphis 4/	Short ton	96.30	243.70	230.00	199.80	180.60
Soybean meal, 50 percent protein, Atlanta 4/	Short ton	101.80	249.90	228.00	202.20	183.80

1/ This price applies to peanuts for edible uses. 2/ Beginning July 1971, quoted as 65% protein, East Coast. 3/ Beginning January 1972, quoted as 65% protein. 4/ 49 to 50% protein. N.A. available.

Compiled from Chemical Marketing Reporter (formerly OPD Reporter), Wall Street Journal. Wash. edition, reports of the Statistical Reporting Services, and the Consumer Marketing Service.

Table 26.--Wholesale and retail prices per pound for fats and oils

Item	February		1973	1974	
	1972	1973	December	January	February
			-- Cents --		
Wholesale Prices					
Butter, creamery, Grade A, (92-score) bulk, New York	68.8	68.9	75.2	71.3	65.6
Butter, creamery, Grade A, (92-score) bulk, Chicago	67.8	67.7	73.0	68.5	64.1
Butter, creamery, Grade A, (92-score) prints, San Francisco	83.8	84.8	68.2	65.8	61.3
Castor oil, dehydrated, tanks, New York	29.0	48.0	N.A.	N.A.	N.A.
Castor oil, No. 1, Brazilian, tanks, imported, New York	20.5	44.5	50.5	48.5	48.0
Coconut oil, crude, tank cars, Pacific Coast, 1/	9.9	13.1	43.1	49.1	53.5
Coconut oil, crude, tanks, f.o.b. New York	10.9	14.1	44.5	N.A.	54.1
Coconut oil, refined, tanks, l.c.l., New York	11.7	15.5	N.A.	N.A.	N.A.
Cod oil, spot, drums, New York	N.A.	11.5	15.5	15.5	17.5
Codliver oil, medicinal, U.S.P., barrels, New York	22.3	24.7	24.7	24.7	24.7
Corn oil, crude, tank cars, f.o.b. Midwest mills	17.3	17.3	32.0	39.0	45.0
Corn oil, crude, tanks, New York	N.A.	N:A.	N.A.	N.A.	N.A.
Corn oil, refined, tanks, New York	20.0	21.1	37.0	41.8	48.8
Cottonseed oil, crude, tank cars, f.o.b., S.E. mills	13.5	12.9	27.0	29.0	33.5
Cottonseed oil, crude, tank cars, f.o.b., Valley	12.2	13.9	25.6	28.9	35.0
Cottonseed oil, crude, tank cars, f.o.b., Texas	12.9	13.2	N.A.	N.A.	N.A.
Cottonseed oil, refined, tanks, New York	16.5	17.6	28.8	31.9	37.6
Degras, Lanolin technical, drums, New York	53.0	52.0	51.0	48.0	53.0
Glycerine, synthetic, refined, 99.5%, tanks, delivered, New York	---	---	---	---	---
Glycerine, natural, refined, USP. 99%, tanks, delivered, New York	22.6	22.6	22.6	22.6	22.6
Grease, A white, tank cars, delivered Chicago	6.4	7.9	16.8	17.5	19.5
Grease, B white, delivered, Chicago	5.4	8.3	14.2	15.6	18.2
Grease, yellow, delivered, Chicago	5.2	7.4	12.8	14.5	16.8
Grease, white, choice, tanks, New York	6.0	8.4	17.3	17.3	19.5
Grease oil, extra No. 1, drums, Chicago, 2/	15.2	15.2	25.0	25.0	25.0
Lard, loose, tank cars, Chicago	11.3	10.5	22.5	24.0	27.0
Lard, prime steam, tierces, Chicago	11.4	12.4	22.4	24.1	30.2
Lard, refined, one and two pound prints, Chicago	15.4	18.3	29.5	30.3	35.8
Lard, refined, carlots, 50-lb. tins, Chicago	N.A.	N.A.	N.A.	N.A.	N.A.
Linseed oil, raw, tank cars, Minneapolis	8.8	9.5	35.0	35.0	40.2
Linseed oil, raw, tanks, New York	10.2	12.9	38.0	39.1	43.6
Margarine, colored, delivered, Eastern U.S.	31.5	31.3	38.1	41.5	42.9
Margarine, yellow, quarters, f.o.b., Chicago	23.8	24.0	37.0	39.3	44.9
Margarine, white, domestic vegetable, Chicago	22.5	23.1	37.0	38.5	40.8
Menhaden oil, crude, tanks, f.o.b., Baltimore	8.3	9.0	11.5	N.A.	N.A.
Menhaden oil, light pressed, tanks, New York	10.5	10.2	13.0	N.A.	N.A.
Oiticica oil, drums, f.o.b., New York	18.5	16.5	24.8	25.5	25.5
Oiticica oil, tanks, New York	16.5	14.5	22.6	23.0	23.0
Olive oil, imported, edible, drums, New York	42.7	42.7	86.7	86.7	86.7
Palm oil, clarified, drums, f.o.b., New York	14.8	15.0	N.A.	N.A.	N.A.
Palm oil, Congo, tank cars, f.o.b., New York	11.8	9.8	19.5	25.9	28.0
Peanut oil, crude, tank cars, f.o.b. S.E. mills	15.4	18.7	32.5	41.6	44.8
Peanut oil, refined, tanks, New York	19.0	21.7	37.1	42.4	48.0
Rapeseed oil, refined (denatured), tanks, New York	---	---	---	---	---
Safflower oil, tanks, New York	---	---	---	---	---
Safflower oil, edible, drums, New York	---	---	---	---	---
Sesame oil, refined, drums, New York	39.0	39.0	55.2	55.2	55.2
Shortening, all vegetable, hydrogenated, 440-lb. drums, New York	24.5	26.9	44.9	45.4	50.7
Shortening, all vegetable, hydrogenated, 3 lb. tins, delivered, Eastern U.S.	32.5	31.6	42.7	42.7	42.7
Soybean oil, crude tank cars, f.o.b., Decatur	11.0	13.0	26.0	28.6	36.4
Soybean oil, refined, tanks, New York	12.5	14.2	27.8	29.1	36.7
Soybean oil, clarified, tanks, New York	---	---	---	---	---
Sperm oil, natural 45°, drums, New York	---	---	---	---	---
Sperm oil, bleached, winter 45°, drums, New York	---	---	---	---	---
Tall oil, crude, tanks, works	---	---	---	---	---
Tall oil, refined, tanks, works	---	---	---	---	---
Tallow, edible, loose, Chicago	10.8	9.9	21.5	22.0	25.0
Tallow, inedible, packers' prime, c.a.f. delivered, Chicago	5.7	8.6	15.4	16.6	19.4
Tallow, inedible, bleachable fancy, delivered, Chicago	6.0	9.0	17.1	17.9	21.8
Tallow, No. 1, inedible, delivered, Chicago	5.3	8.1	13.3	15.4	17.9
Tallow, special, inedible, tanks, delivered, New York	5.6	6.7	N.A.	N.A.	N.A.
Tung oil, imported, drums, f.o.b., New York	15.5	15.5	35.0	35.0	36.0
Tung oil, imported, tanks, New York	11.5	12.8	32.0	32.0	33.1
Tung oil, domestic, tanks, f.o.b. mills	N.A.	N.A.	N.A.	N.A.	N.A.
Retail prices 3/					
Butter	87.5	87.4	101.5	100.1	97.1
Margarine	33.3	32.7	45.1	45.9	48.2
Shortening	32.9	32.2	45.7	46.1	47.8
Salad Dressing (Italian)	82.0	81.6	88.0	88.4	88.6
Peanut Butter	67.4	68.2	73.6	74.1	74.5
Cooking and Salad oils	43.8	41.9	56.3	56.5	58.5

1/ Includes 1 cent import duty.
2/ Beginning June 1971, quoted as lard oil, No. 1, New York.
3/ Leading cities.
N.A.--Not available.

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